

REPUBLIC OF THE PHILLIPINES

**DATA COLLECTION SURVEY FOR
SEWERAGE SYSTEMS
IN WEST METRO MANILA**

**FINAL REPORT
(VOLUME 2 DRAWINGS)**

September 2016

Japan International Cooperation Agency (JICA)

Nippon Koei Co., Ltd. (NK)

KRI International Corporation (KRI)

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CR(3)
16-004

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**DATA COLLECTION SURVEY FOR
SEWERAGE SYSTEMS
IN WEST METRO MANILA**

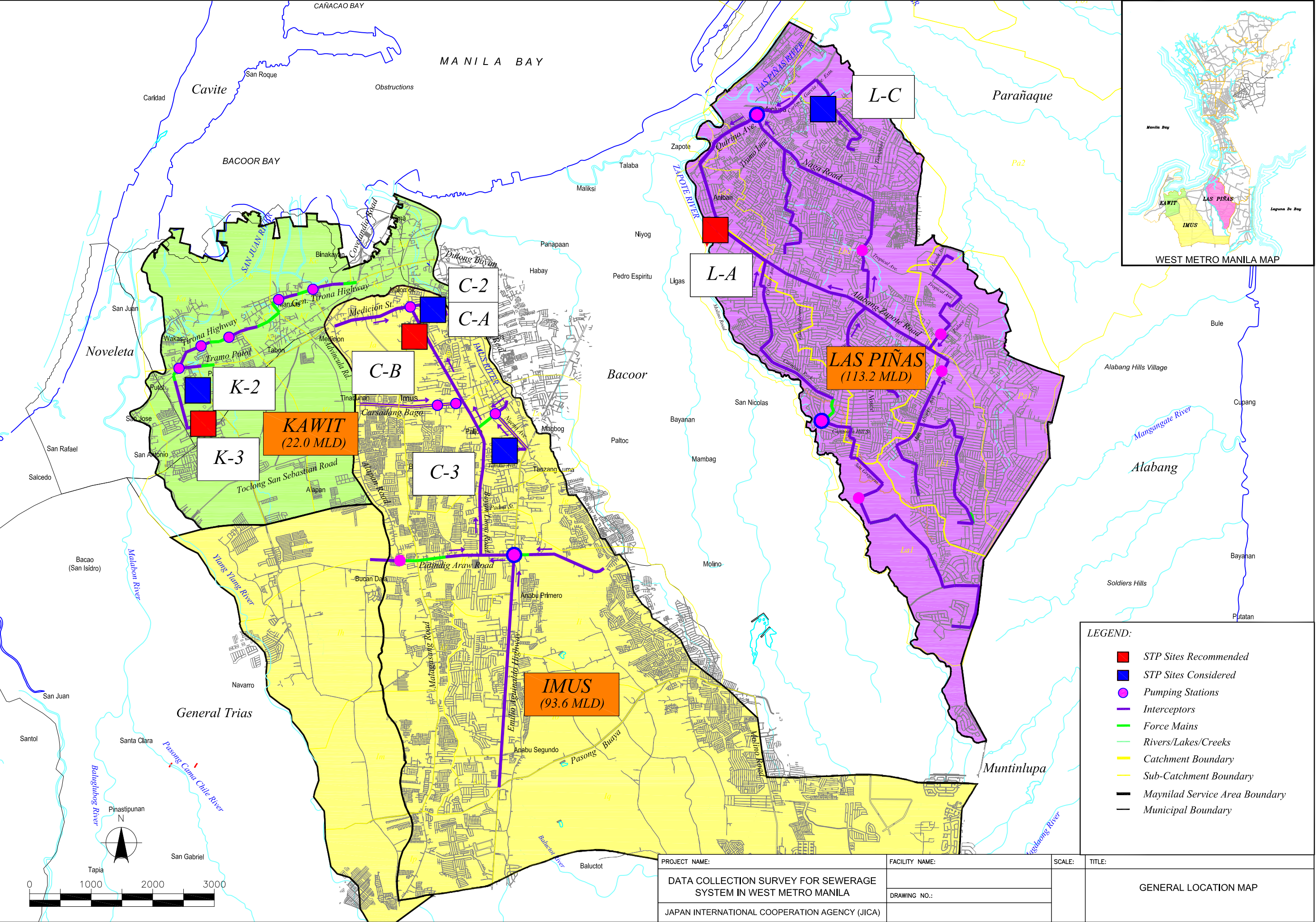
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(VOLUME 2 DRAWINGS)**

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DATA COLLECTION SURVEY FOR SEWERAGE SYSTEMS IN WEST METRO MANILA

FINAL REPORT
(VOLUME 2 DRAWINGS)

List of Drawings for Layout of Sewage Treatment Plant

DWG NO.	DRAWING TITLE	SCALE
	LAS PINAS CITY	
CAS-LP-1	LAS PINAS L-A CAS Q=113,200m ³ /d WITH DIGESTION PROCESS	1:2000
CAS-LP-2	LAS PINAS L-A CAS Q=113,200m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBR-LP-1	LAS PINAS L-A MBR Q=113,200m ³ /d WITH DIGESTION PROCESS	1:2000
MBR-LP-2	LAS PINAS L-A MBR Q=113,200m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-LP-1(1/2)	LAS PINAS L-A SBR Q=56,600m ³ /d WITH DIGESTION PROCESS	1:2000
SBR-LP-1(2/2)	LAS PINAS L-C SBR Q=56,600m ³ /d WITH DIGESTION PROCESS	1:2000
SBR-LP-2(1/2)	LAS PINAS L-A SBR Q=64,900m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-LP-2(2/2)	LAS PINAS L-C SBR Q=48,300m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBBR-LP-1(1/2)	LAS PINAS L-A MBBR Q=80,000m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-LP-1(2/2)	LAS PINAS L-C MBBR Q=33,200m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-LP-2	LAS PINAS L-A MBBR Q=113,200m ³ /d WITHOUT DIGESTION PROCESS	1:2000
	IMUS CITY	
CAS-IMS-1	IMUS C-A CAS Q=93,600m ³ /d WITH DIGESTION PROCESS	1:2000
CAS-IMS-2	IMUS C-A CAS Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
CAS-IMS-3	IMUS C-B CAS Q=93,600m ³ /d WITH DIGESTION PROCESS	1:2000
CAS-IMS-4	IMUS C-B CAS Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBR-IMS-1	IMUS C-A MBR Q=93,600m ³ /d WITH DIGESTION PROCESS	1:2000
MBR-IMS-2	IMUS C-A MBR Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBR-IMS-3	IMUS C-B MBR Q=93,600m ³ /d WITH DIGESTION PROCESS	1:2000
MBR-IMS-4	IMUS C-B MBR Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-IMS-1(1/2)	IMUS C-2 C-A SBR Q=57,800m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITH DIGESTION PROCESS	1:2000
SBR-IMS-1(2/2)	IMUS C-3 SBR Q=35,800m ³ /d WITH DIGESTION PROCESS	1:2000
SBR-IMS-2(1/2)	IMUS C-2 C-A SBR Q=57,800m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITHOUT DIGESTION PROCESS	1:2000
SBR-IMS-2(2/2)	IMUS C-3 SBR Q=35,800m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-IMS-3(1/2)	IMUS C-A SBR Q=50,000m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITH DIGESTION PROCESS	1:2000
SBR-IMS-3(2/2)	IMUS C-3 SBR Q=43,600m ³ /d WITH DIGESTION PROCESS	1:2000
SBR-IMS-4(1/2)	IMUS C-A SBR Q=57,800m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-IMS-4(2/2)	IMUS C-3 SBR Q=35,800m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-IMS-5	IMUS C-B SBR Q=93,600m ³ /d WITH DIGESTION PROCESS	1:2000
SBR-IMS-6	IMUS C-B SBR Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBBR-IMS-1(1/2)	IMUS C-2 C-A MBBR Q=33,200m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITH DIGESTION PROCESS	1:2000
MBBR-IMS-1(2/2)	IMUS C-3 MBBR Q=60,400m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-IMS-2(1/2)	IMUS C-2 C-A MBBR Q=33,200m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITHOUT DIGESTION PROCESS	1:2000
MBBR-IMS-2(2/2)	IMUS C-3 MBBR Q=60,400m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBBR-IMS-3(1/2)	IMUS C-A MBBR Q=65,000m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-IMS-3(2/2)	IMUS C-3 MBBR Q=28,600m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-IMS-4	IMUS C-A MBBR Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBBR-IMS-5	IMUS C-B MBBR Q=93,600m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-IMS-6	IMUS C-B MBBR Q=93,600m ³ /d WITHOUT DIGESTION PROCESS	1:2000
	KAWIT TOWN	
CAS-KWT-1	KAWIT K-3 CAS Q=22,000m ³ /d WITH DIGESTION PROCESS	1:2000
CAS-KWT-2	KAWIT K-3 CAS Q=22,000m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBR-KWT-1	KAWIT K-2 MBR Q=22,000m ³ /d WITH DIGESTION PROCESS	1:2000
MBR-KWT-2	KAWIT K-2 MBR Q=22,000m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBR-KWT-3	KAWIT K-3 MBR Q=22,000m ³ /d WITH DIGESTION PROCESS	1:2000
MBR-KWT-4	KAWIT K-3 MBR Q=22,000m ³ /d WITHOUT DIGESTION PROCESS	1:2000
SBR-KWT-1	KAWIT K-3 SBR Q=22,000m ³ /d WITH DIGESTION PROCESS	1:2000
SBR-KWT-2	KAWIT K-3 SBR Q=22,000m ³ /d WITHOUT DIGESTION PROCESS	1:2000
MBBR-KWT-1	KAWIT K-3 MBBR Q=22,000m ³ /d WITH DIGESTION PROCESS	1:2000
MBBR-KWT-2	KAWIT K-3 MBBR Q=22,000m ³ /d WITHOUT DIGESTION PROCESS	1:2000

List of Drawings for Sewerage Plan

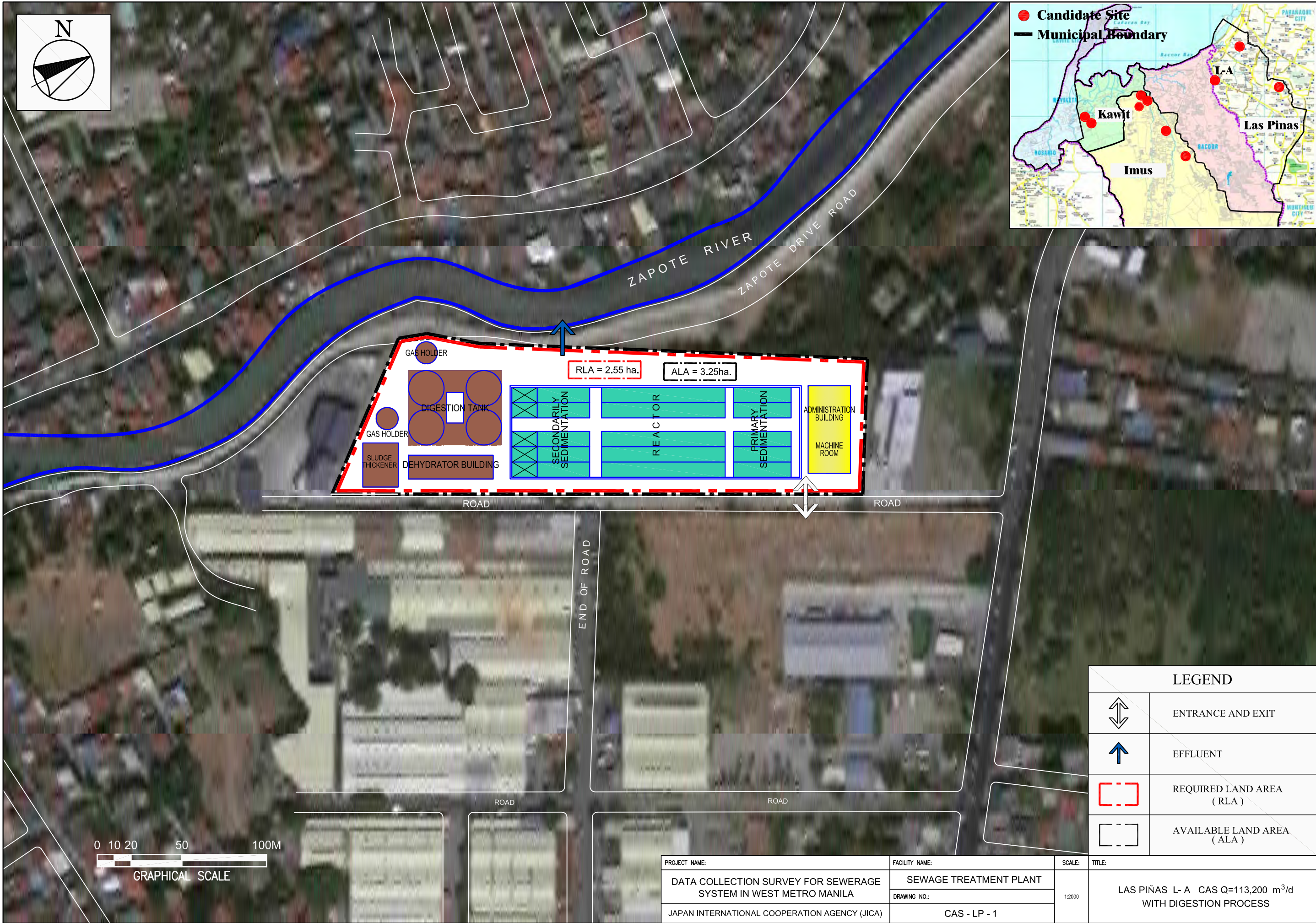
DWG NO.	DRAWING TITLE	SCALE
	LAS PINAS CITY	
CAS-LP-1&2	SEWERAGE PLAN FOR STP OPTIONS IN LAS PINAS CITY (CAS-LP-1&2)	As shown
MBR-LP-1&2	SEWERAGE PLAN FOR STP OPTIONS IN LAS PINAS CITY (MBR-LP-1&2)	As shown
SBR-LP-1	SEWERAGE PLAN FOR STP OPTIONS IN LAS PINAS CITY (SBR-LP-1)	As shown
SBR-LP-2	SEWERAGE PLAN FOR STP OPTIONS IN LAS PINAS CITY (SBR-LP-2)	As shown
MBBR-LP-1	SEWERAGE PLAN FOR STP OPTIONS IN LAS PINAS CITY (MBBR-LP-1)	As shown
MBBR-LP-2	SEWERAGE PLAN FOR STP OPTIONS IN LAS PINAS CITY (MBBR-LP-2)	As shown
	IMUS CITY	
CAS-IMS-1&2	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (CAS-IMS-1&2)	As shown
CAS-IMS-3&4	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (CAS-IMS-3&4)	As shown
MBR-IMS-1&2	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (MBR-IMS-1&2)	As shown
MBR-IMS-3&4	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (MBR-IMS-3&4)	As shown
SBR-IMS-1&2	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (SBR-IMS-1&2)	As shown
SBR-IMS-3	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (SBR-IMS-3)	As shown
SBR-IMS-4	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (SBR-IMS-4)	As shown
SBR-IMS-5&6	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (SBR-IMS-5&6)	As shown
MBBR-IMS-1&2	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (MBBR-IMS-1&2)	As shown
MBBR-IMS-3	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (MBBR-IMS-3)	As shown
MBBR-IMS-4	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (MBBR-IMS-4)	As shown
MBBR-IMS-5&6	SEWERAGE PLAN FOR STP OPTIONS IN IMUS CITY (MBBR-IMS-5&6)	As shown
	KAWIT TOWN	
CAS-KWT-1&2	SEWERAGE PLAN FOR STP OPTIONS IN KAWIT TOWN (CAS-KWT-1&2)	As shown
MBR-KWT-1&2	SEWERAGE PLAN FOR STP OPTIONS IN KAWIT TOWN (MBR-KWT-1&2)	As shown
MBR-KWT-3&4	SEWERAGE PLAN FOR STP OPTIONS IN KAWIT TOWN (MBR-KWT-3&4)	As shown
SBR-KWT-1&2	SEWERAGE PLAN FOR STP OPTIONS IN KAWIT TOWN (SBR-KWT-1&2)	As shown
MBBR-KWT-1&2	SEWERAGE PLAN FOR STP OPTIONS IN KAWIT TOWN (MBBR-KWT-1&2)	As shown

List of Drawings for Pump Station

DWG NO.	DRAWING TITLE	SCALE
PS-1	TYPICAL LAYOUT OF MANHOLE PUMP STATION (SMALL) (PLAN & SECTION)	1:20
PS-2	TYPICAL LAYOUT OF MANHOLE PUMP STATION (LARGE) (PLAN & SECTION)	1:40
PS-3	TYPICAL LAYOUT OF LARGE PUMP STATION (WITH PUMP HOUSE) (PLAN & SECTION)	1:40

Drawings-1

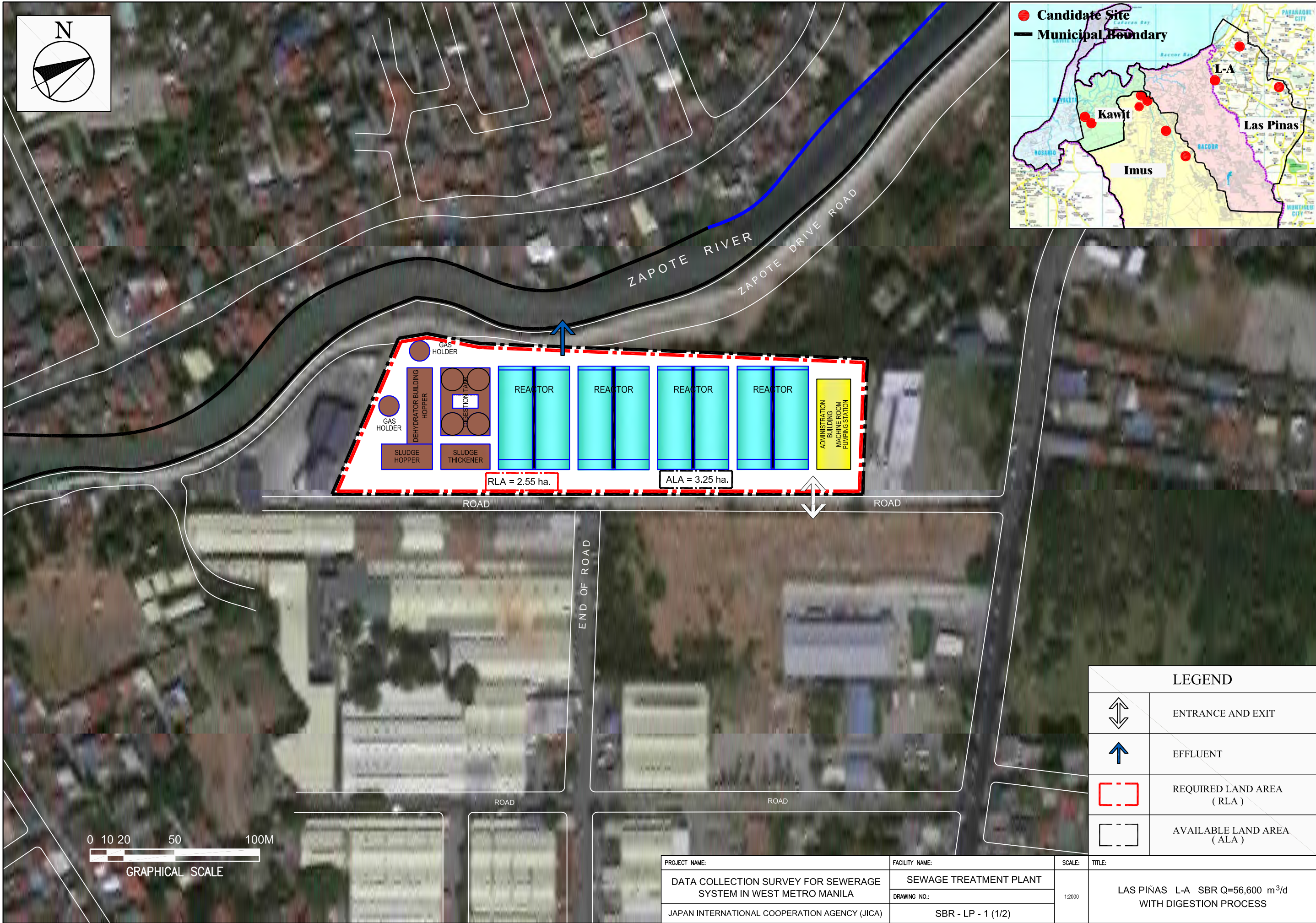
Layout of Sewage Treatment Plant

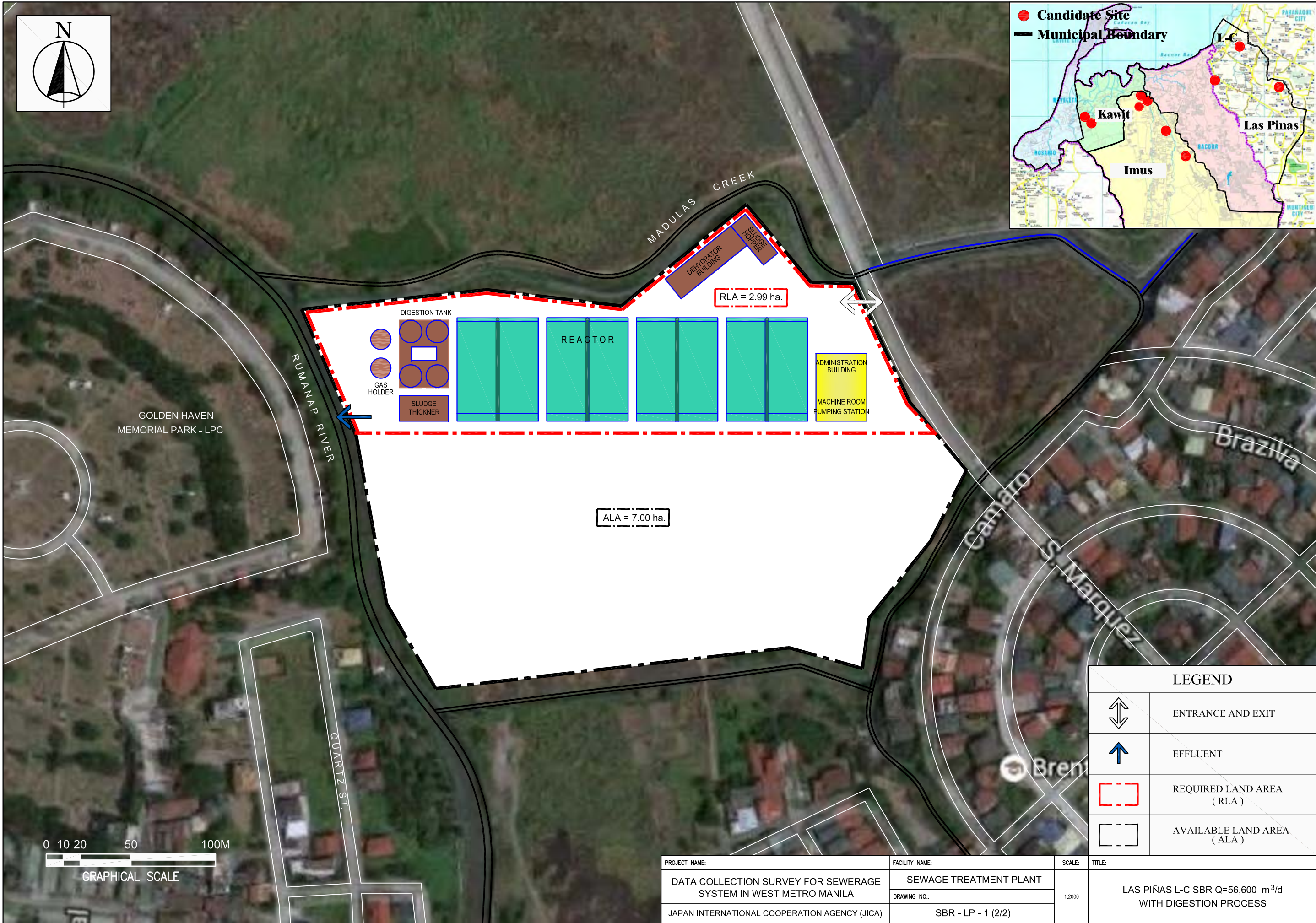




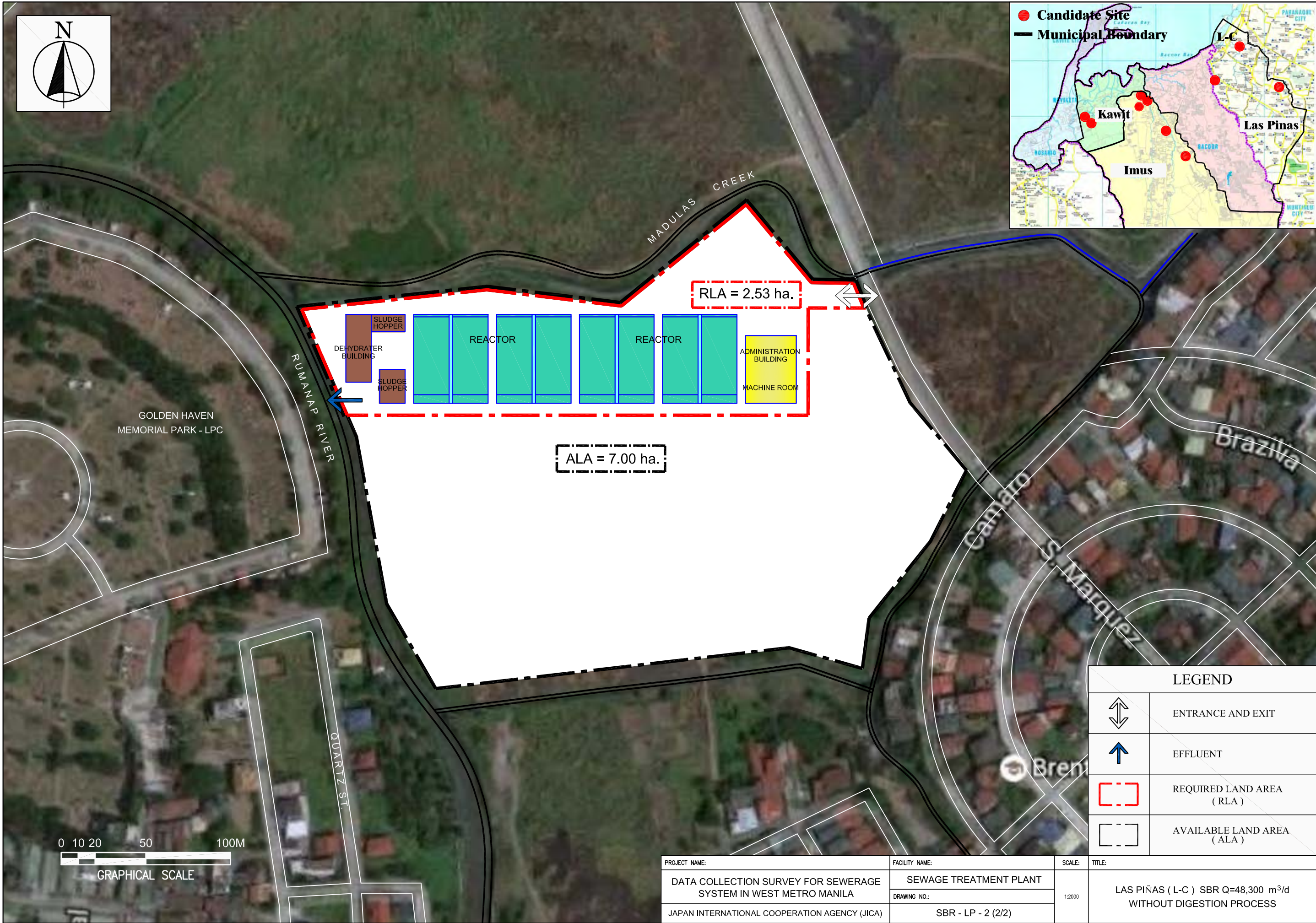






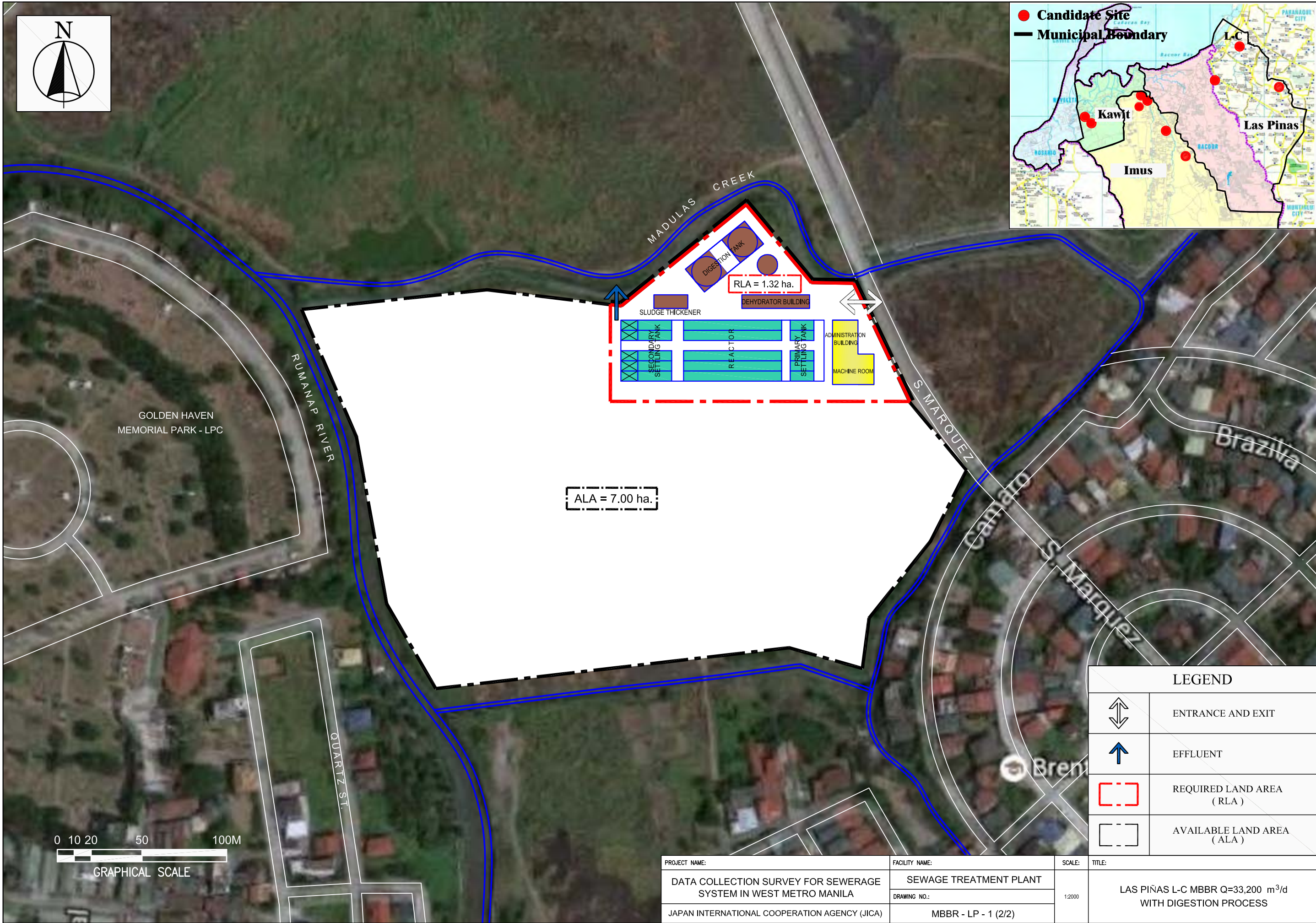




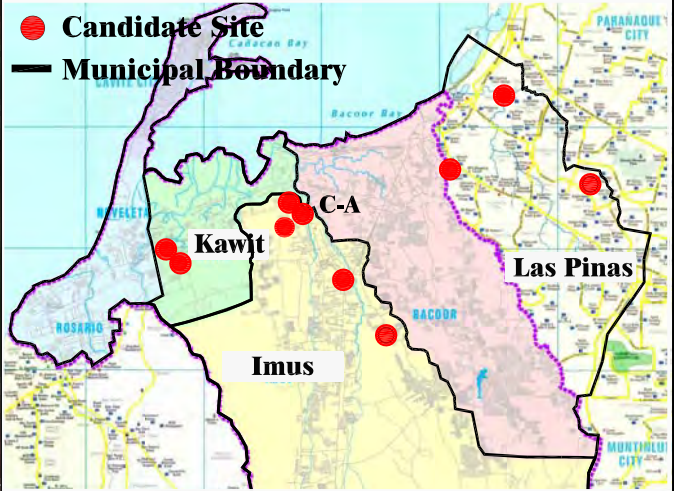
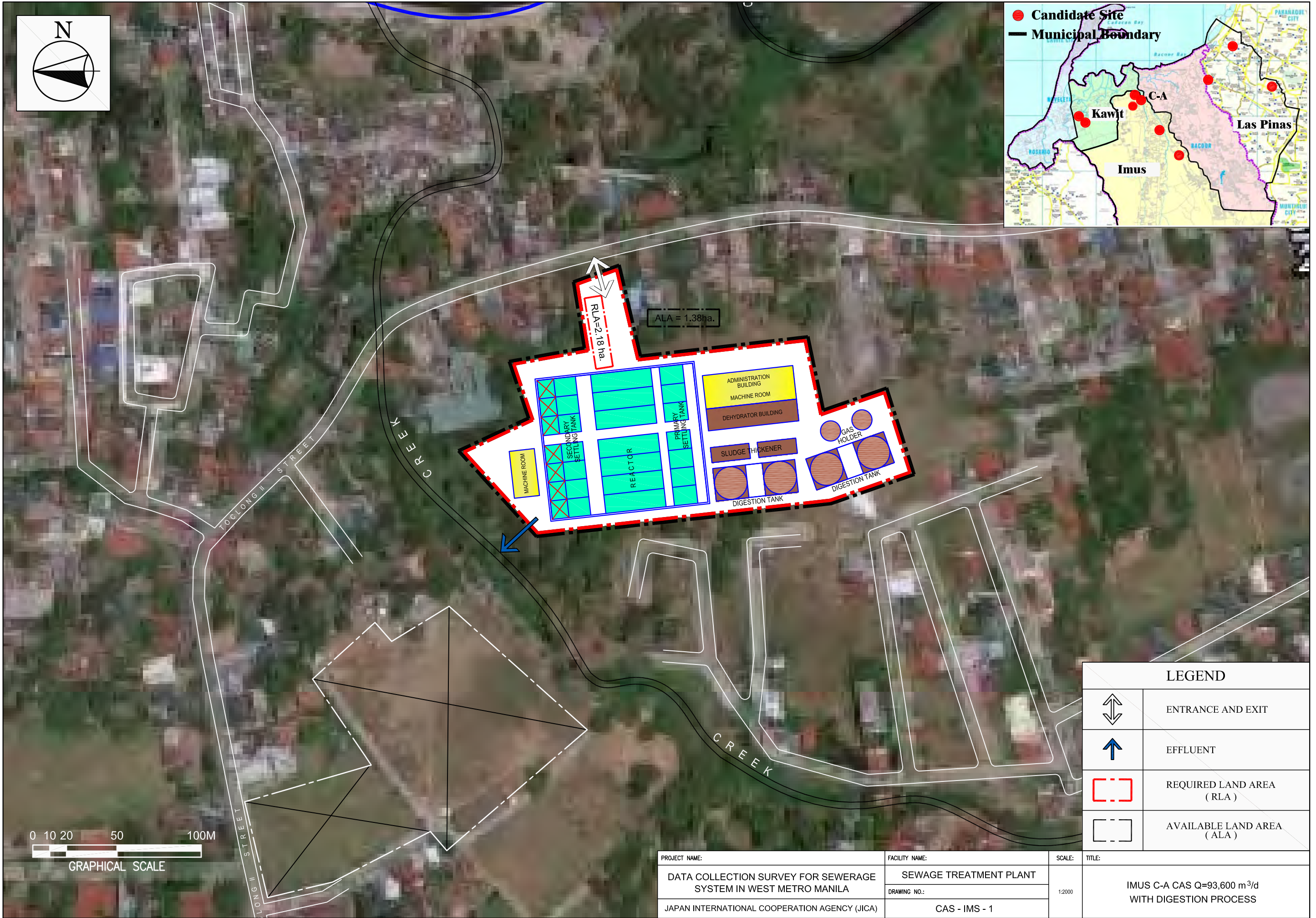


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DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	LAS PIÑAS (L-C) SBR Q=48,300 m³/d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - LP - 2 (2/2)		



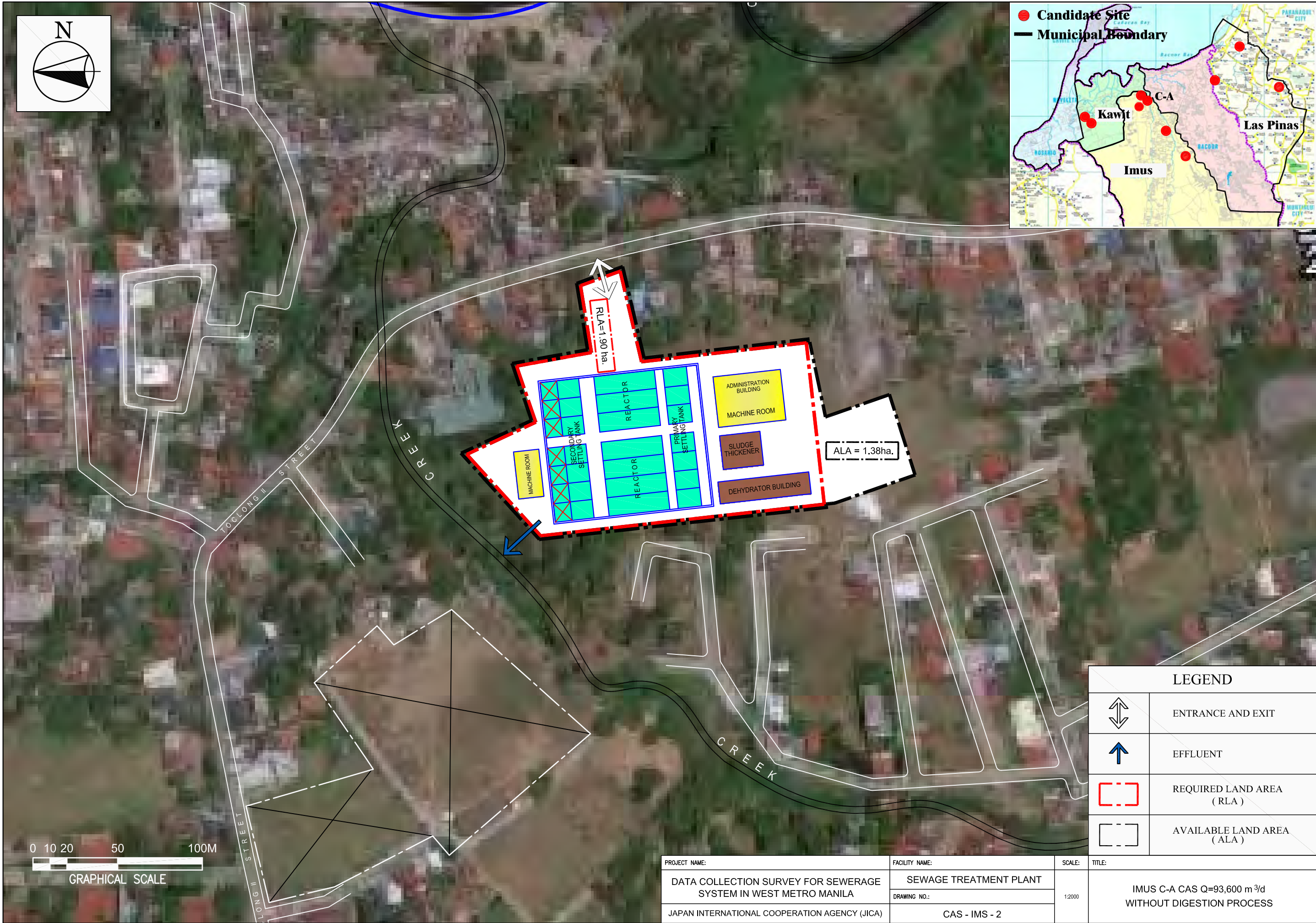


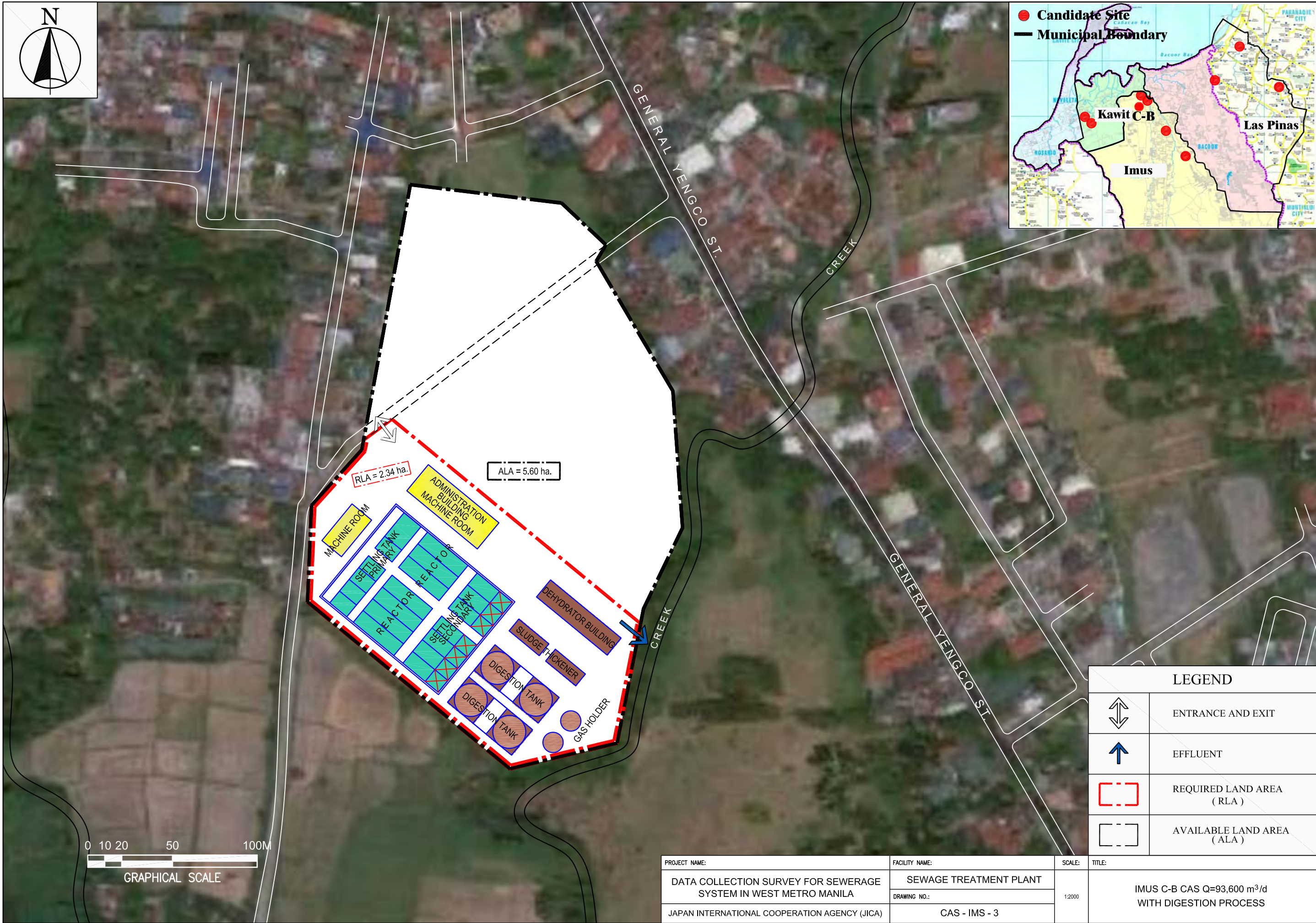




LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

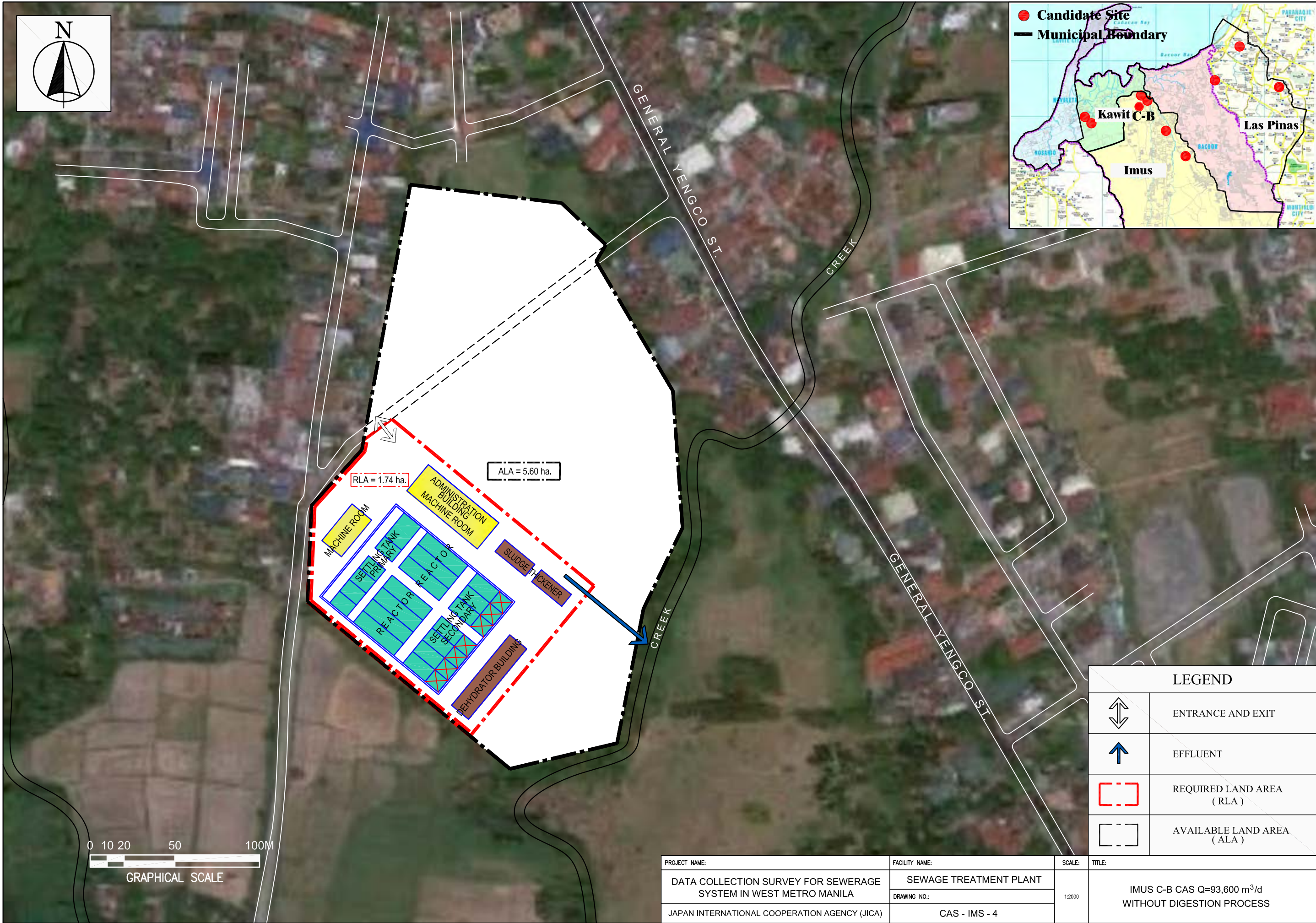
PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-A CAS Q=93,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DRAWING NO.: CAS - IMS - 1		





LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-B CAS Q=93,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DRAWING NO.: CAS - IMS - 3		

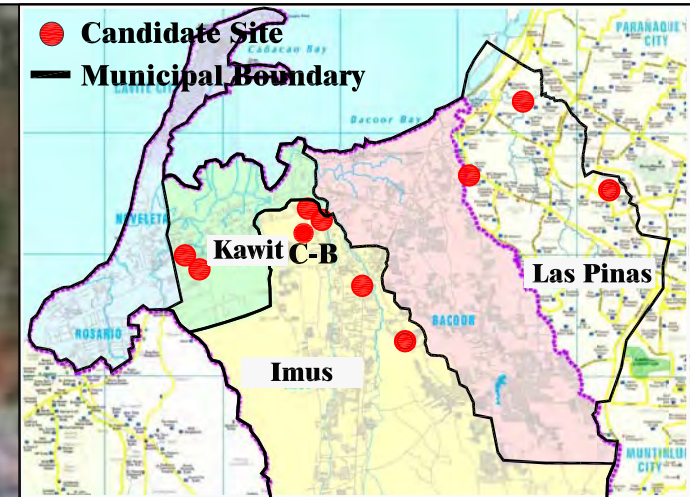
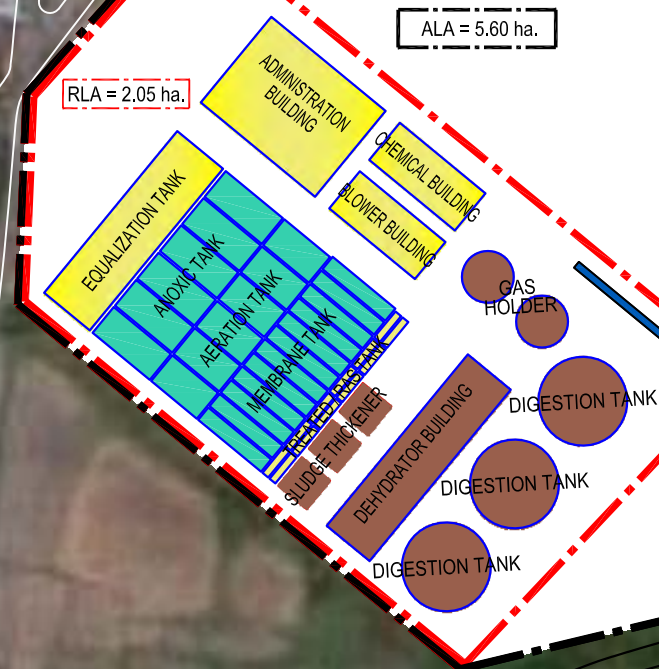
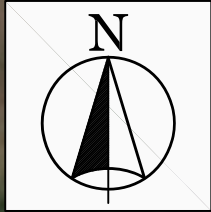






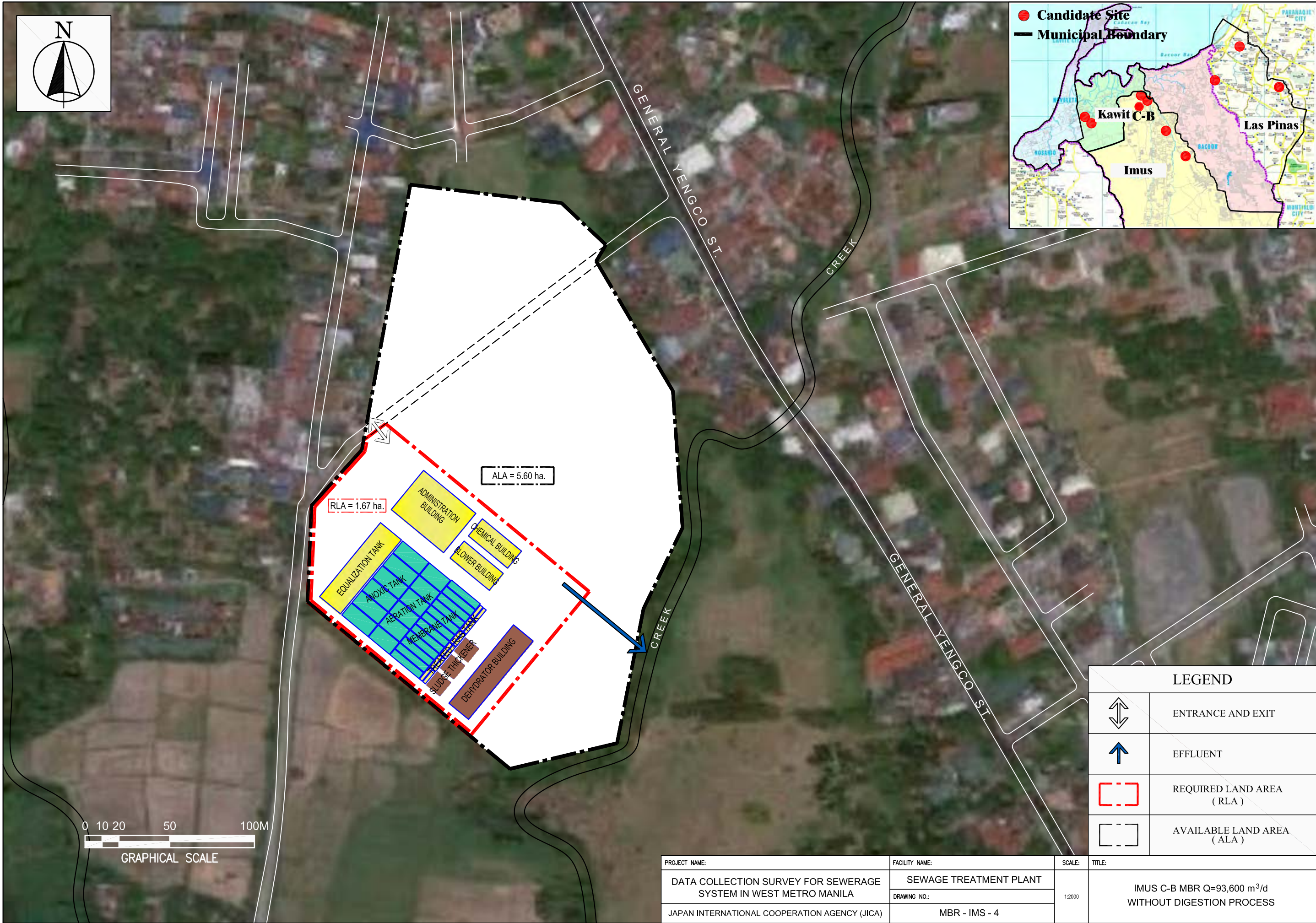
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	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

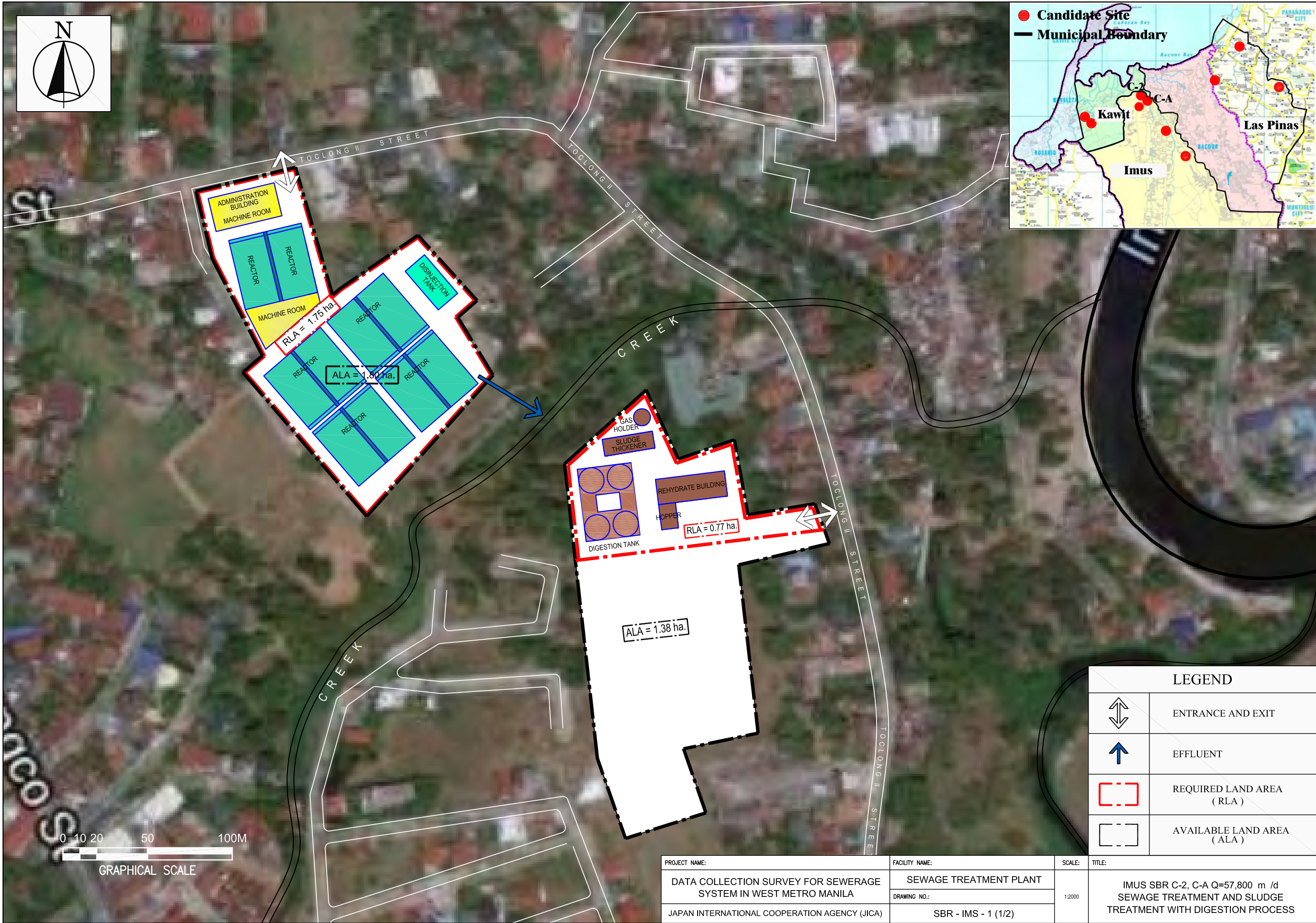
PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
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	DRAWING NO.:		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBR - IMS - 2		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-B MBR Q=93,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBR - IMS - 3		

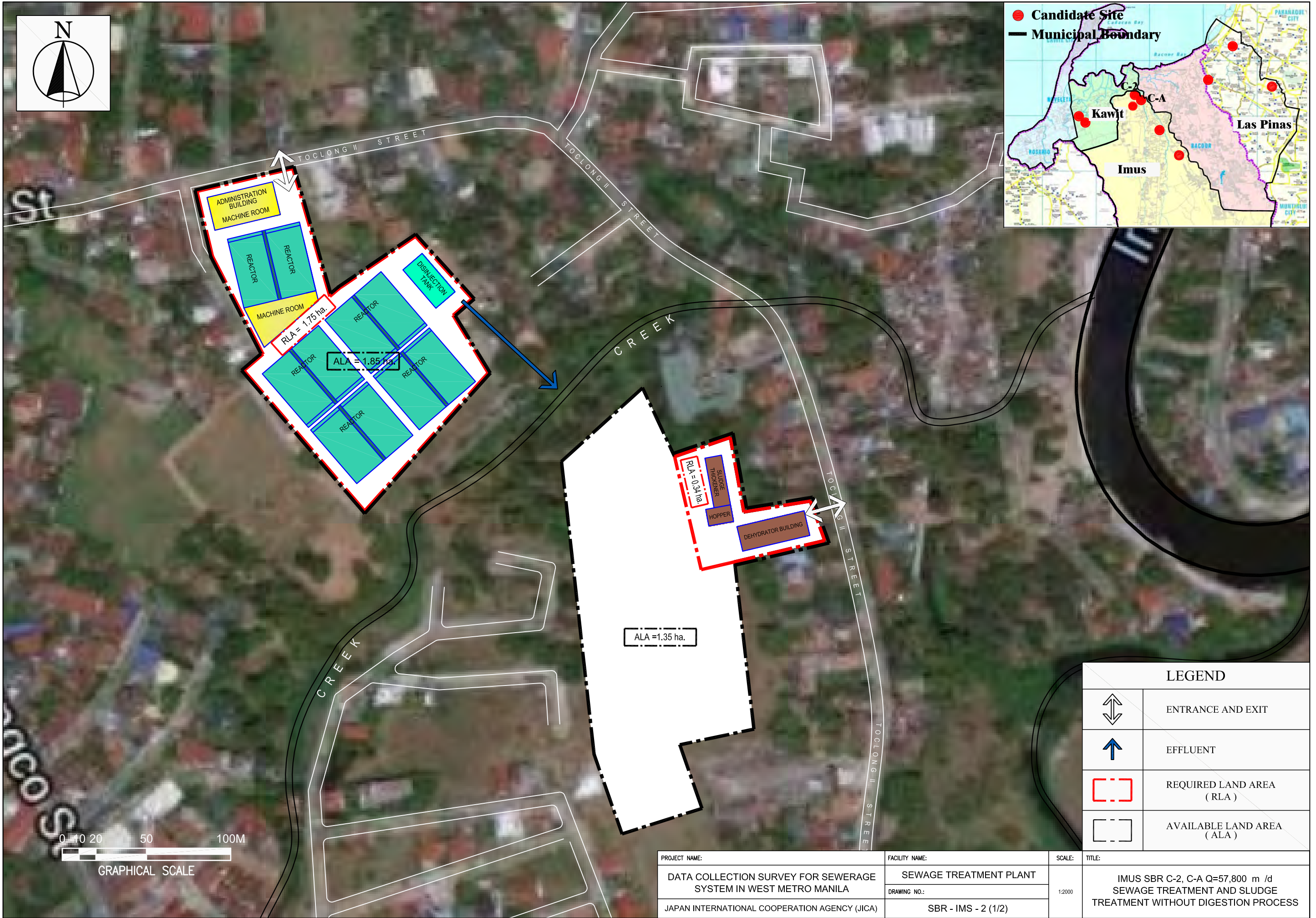




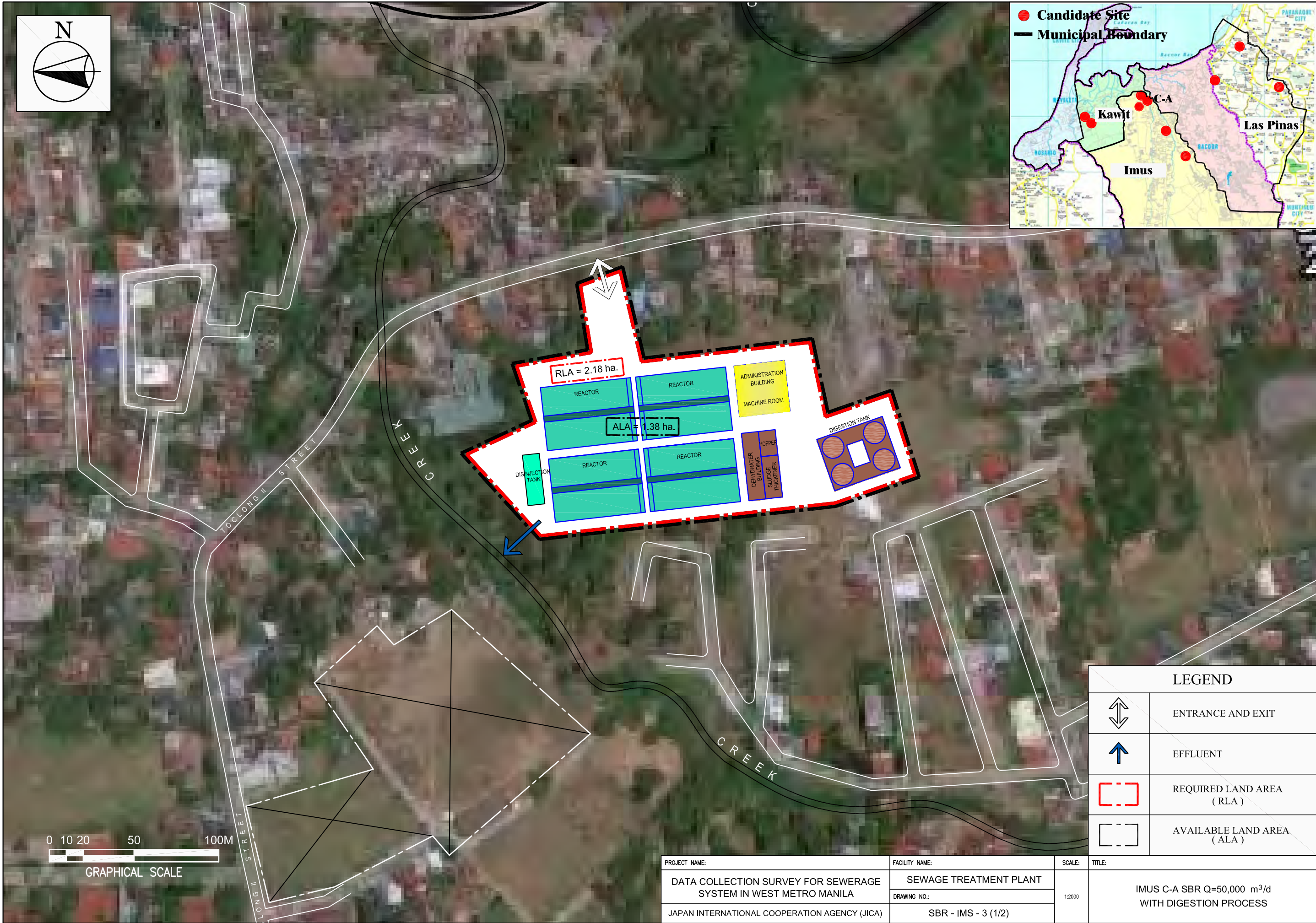
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS SBR C-2, C-A Q=57,800 m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITH DIGESTION PROCESS
	DRAWING NO.:		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - IMS - 1 (1/2)		







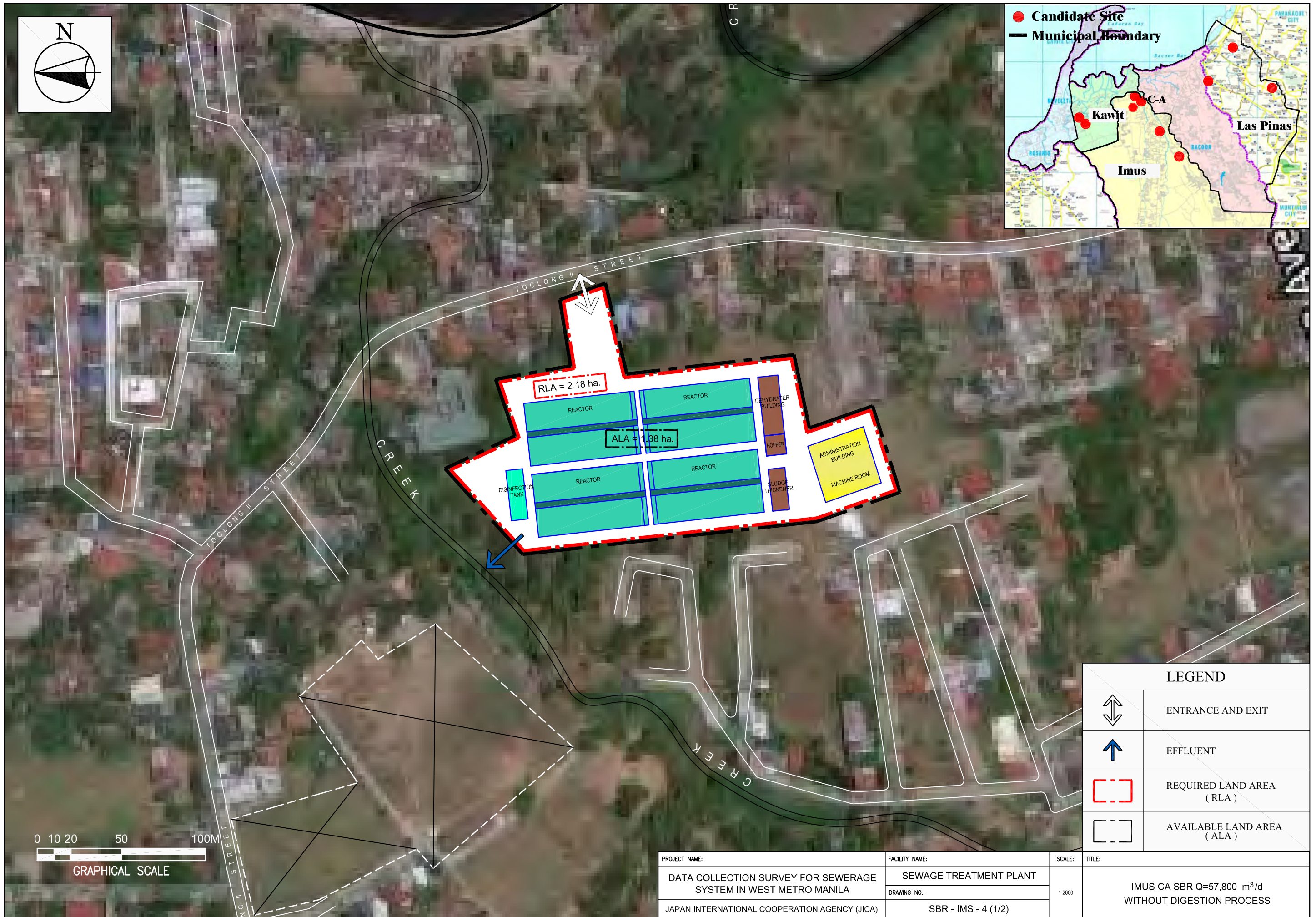
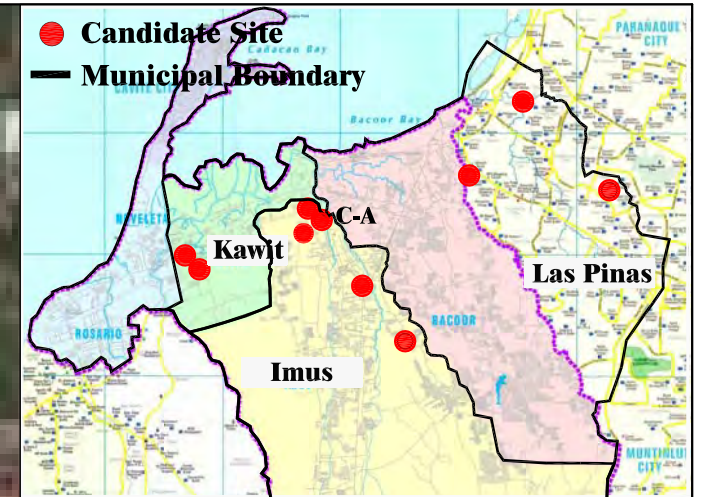
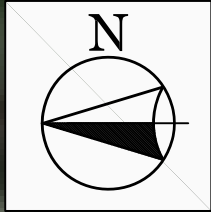


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DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-A SBR Q=50,000 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - IMS - 3 (1/2)		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

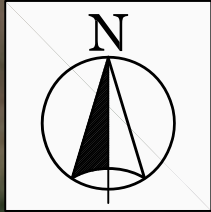
PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-3 SBR Q=43,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - IMS - 3 (2/2)		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS CA SBR Q=57,800 m ³ /d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - IMS - 4 (1/2)		





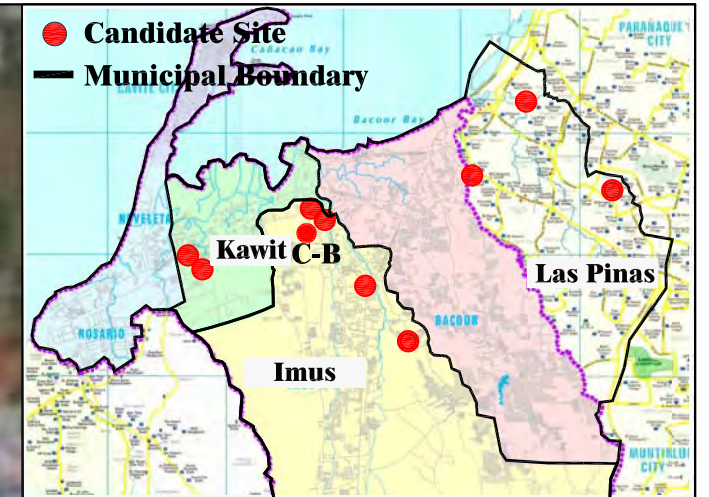
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GRAPHICAL SCALE



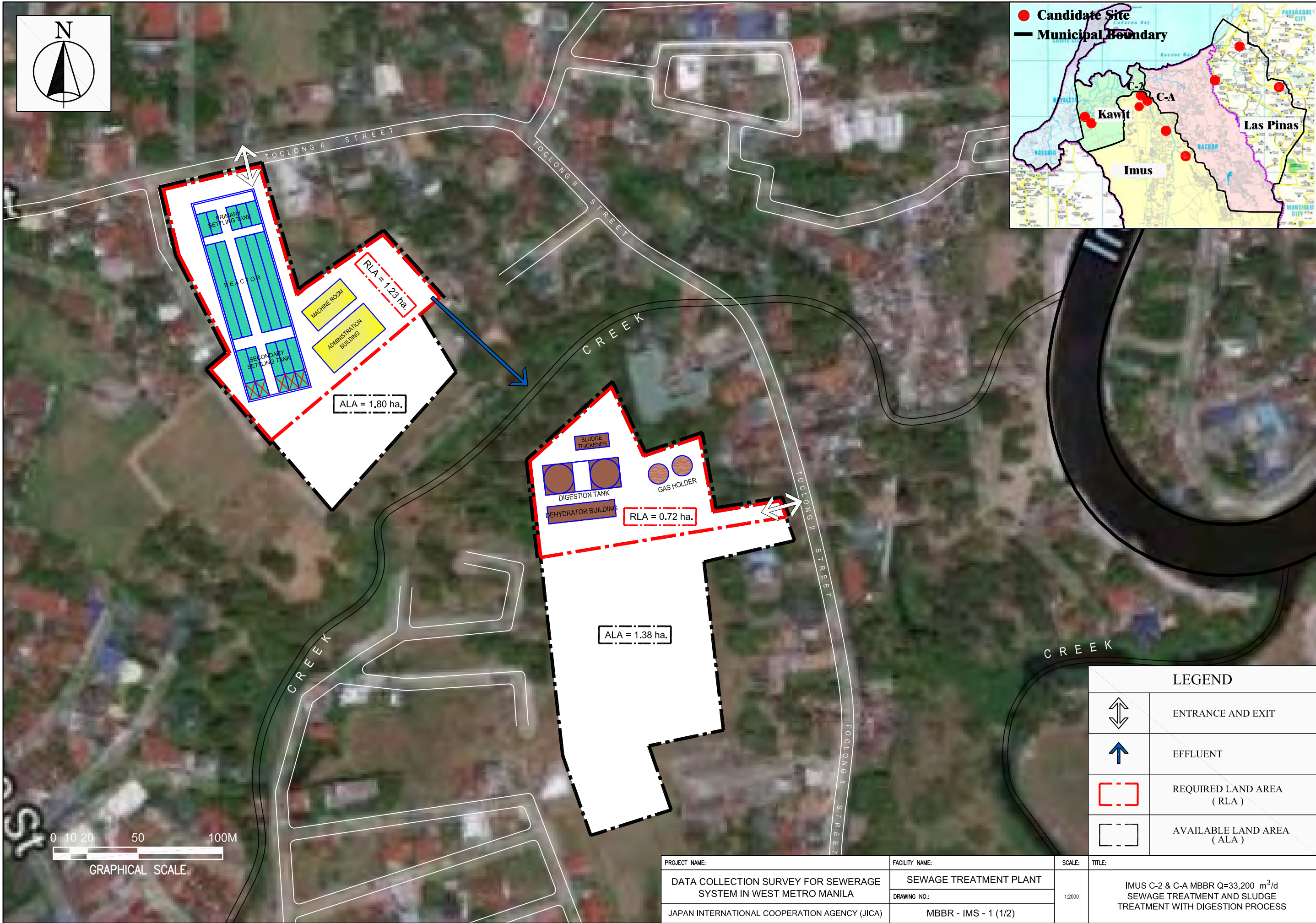
ALA = 5.60 ha.

RLA = 3.27 ha.



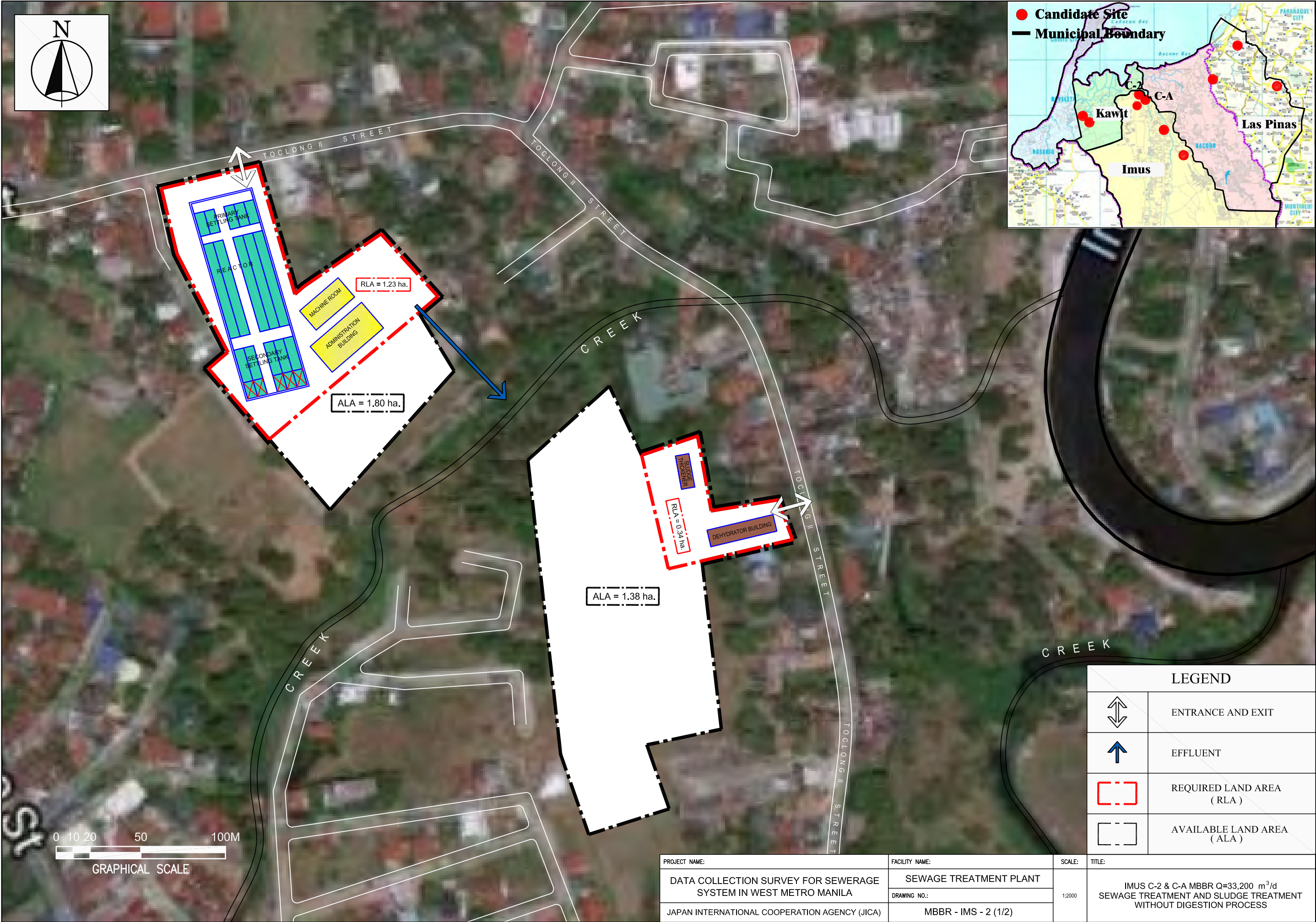
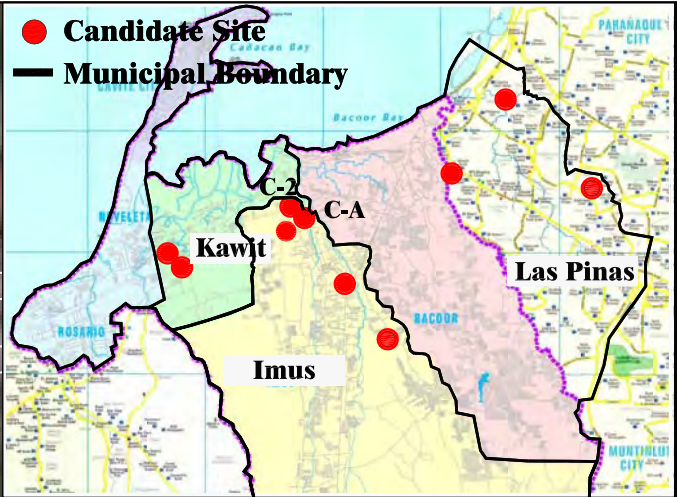
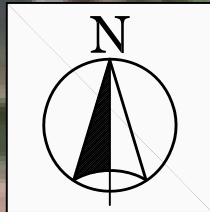
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-B SBR Q=93,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - IMS - 5		





PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-3 MBBR Q=60,400 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS - 1 (2/2)		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

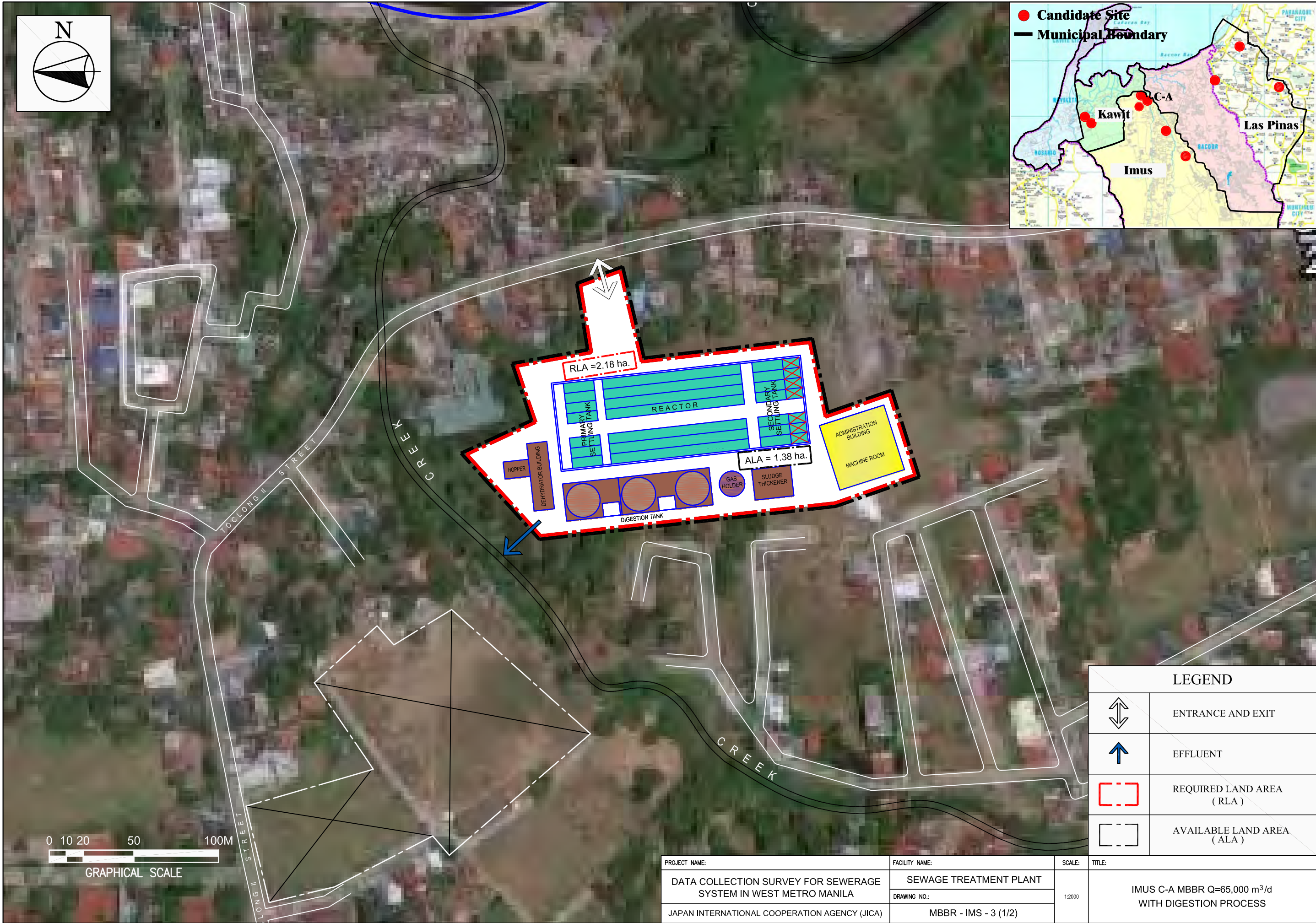


PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-2 & C-A MBBR Q=33,200 m ³ /d SEWAGE TREATMENT AND SLUDGE TREATMENT WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS - 2 (1/2)		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-3 MBBR Q=60,400 m ³ /d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS - 2 (2/2)		



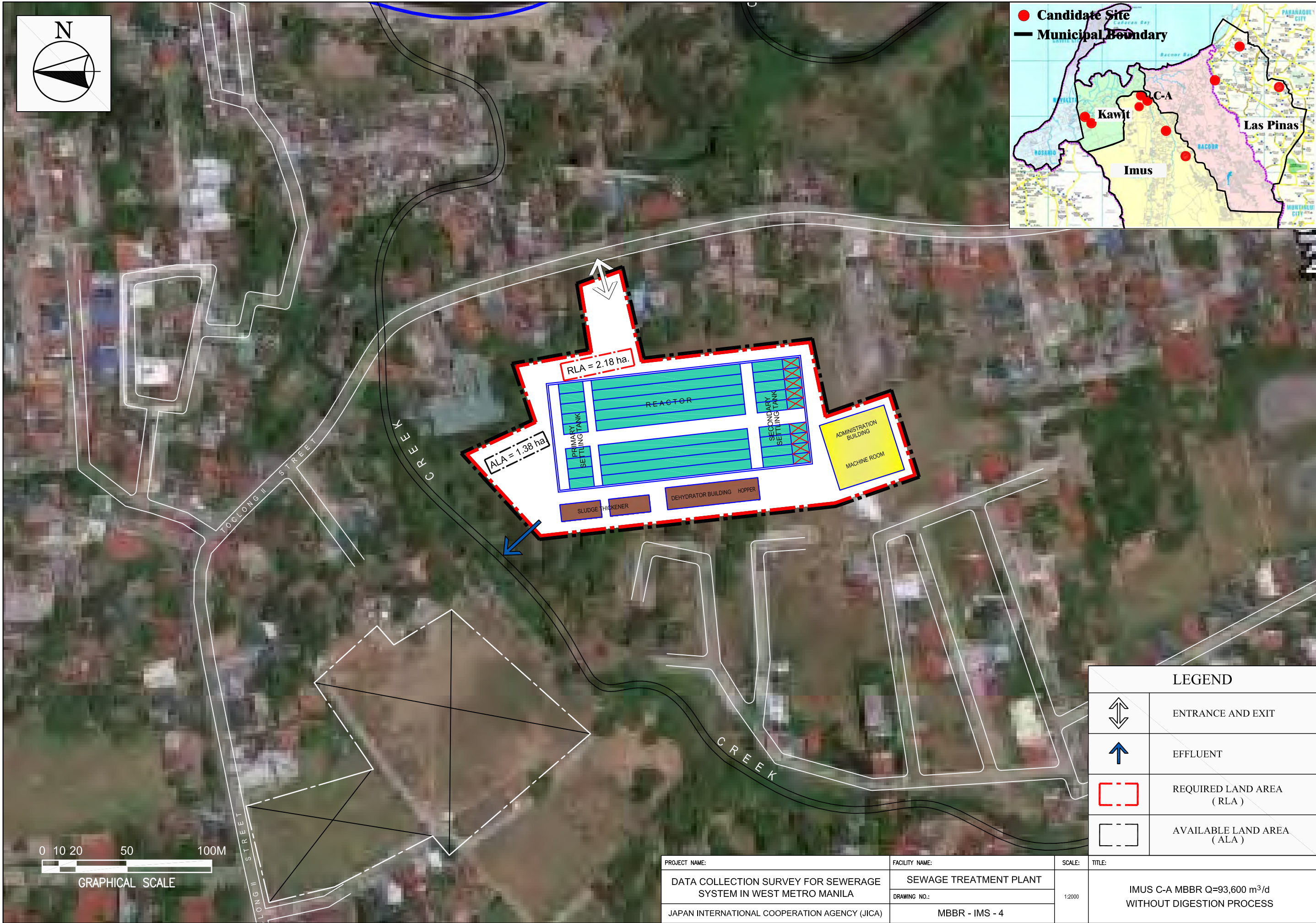
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-A MBBR Q=65,000 m ³ /d WITH DIGESTION PROCESS
	DRAWING NO.:		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS - 3 (1/2)		



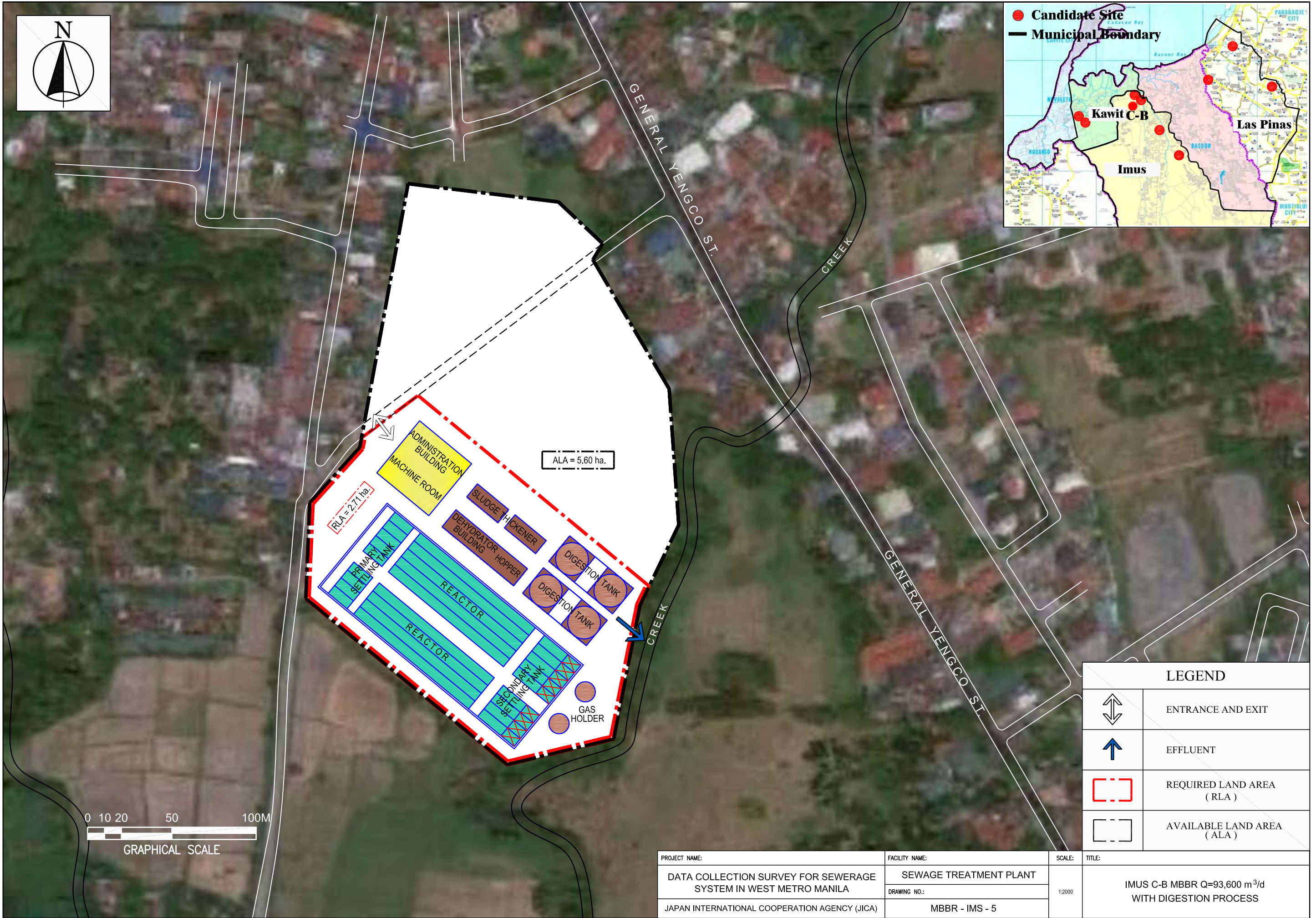
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-3 MBBR Q=28,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS -3 (2/2)		



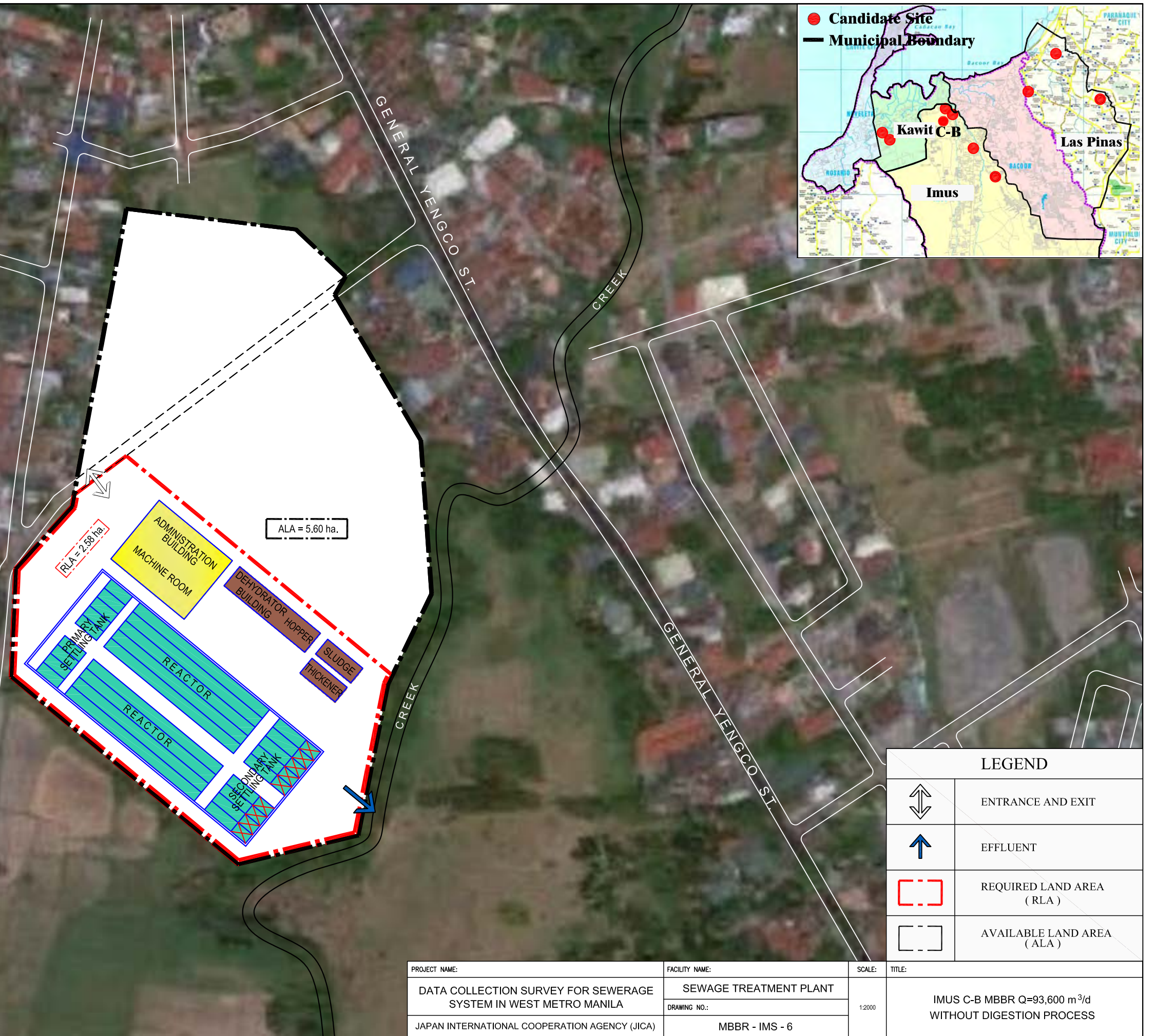
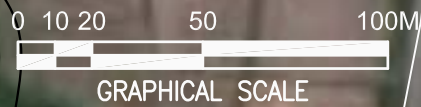
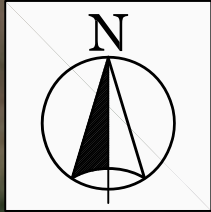
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-A MBBR Q=93,600 m ³ /d WITHOUT DIGESTION PROCESS
	DRAWING NO.:		
	MBBR - IMS - 4		
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)			



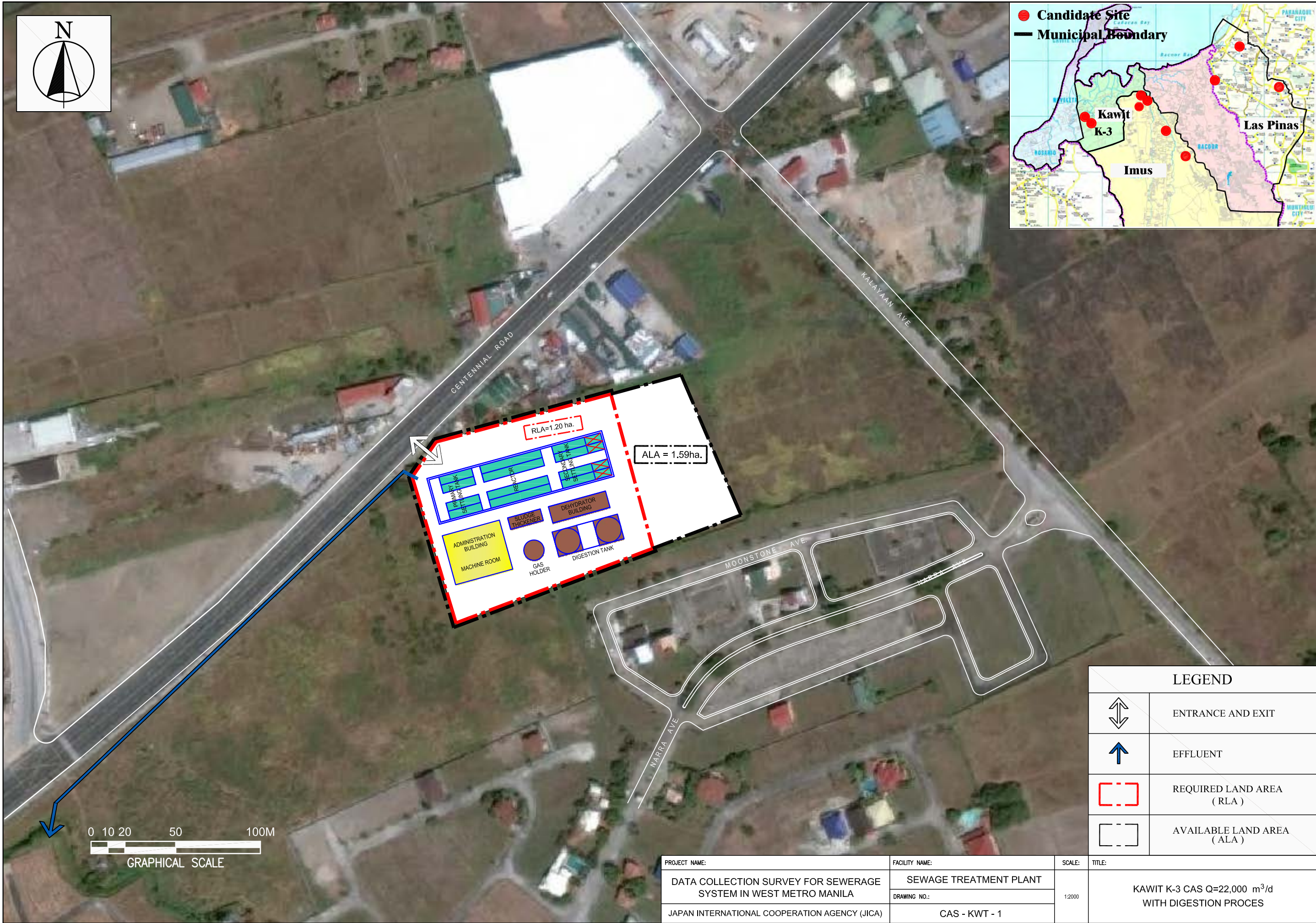
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-B MBBR Q=93,600 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS - 5		



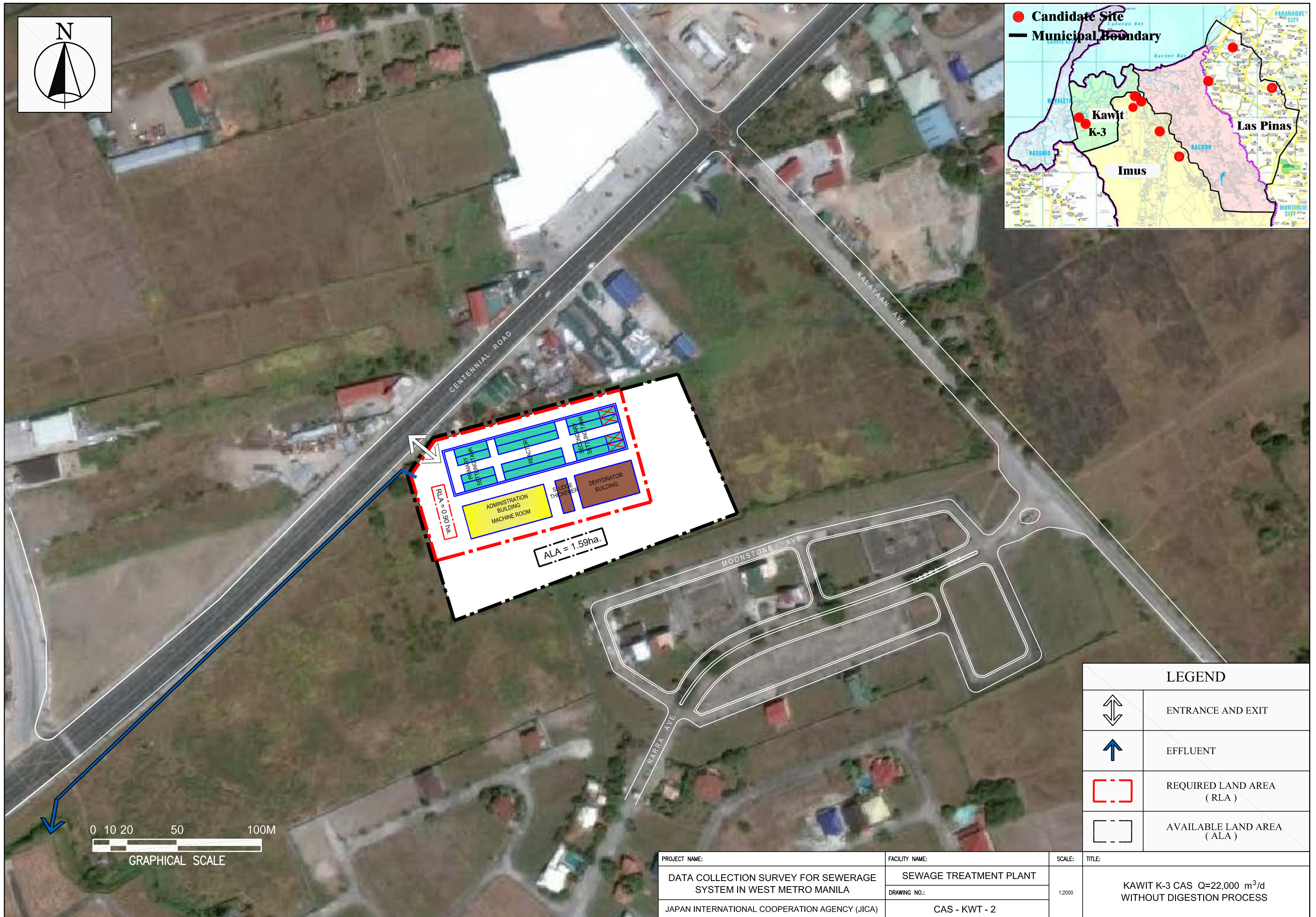
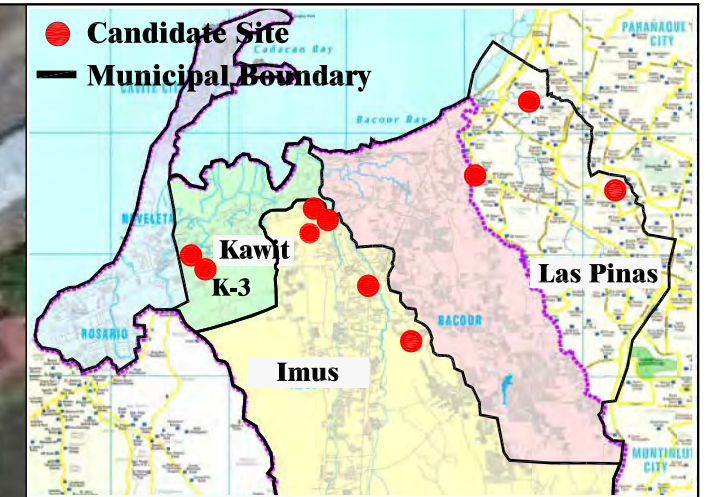
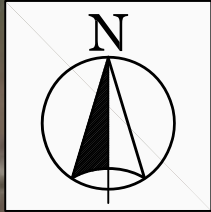
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	IMUS C-B MBBR Q=93,600 m ³ /d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBBR - IMS - 6		



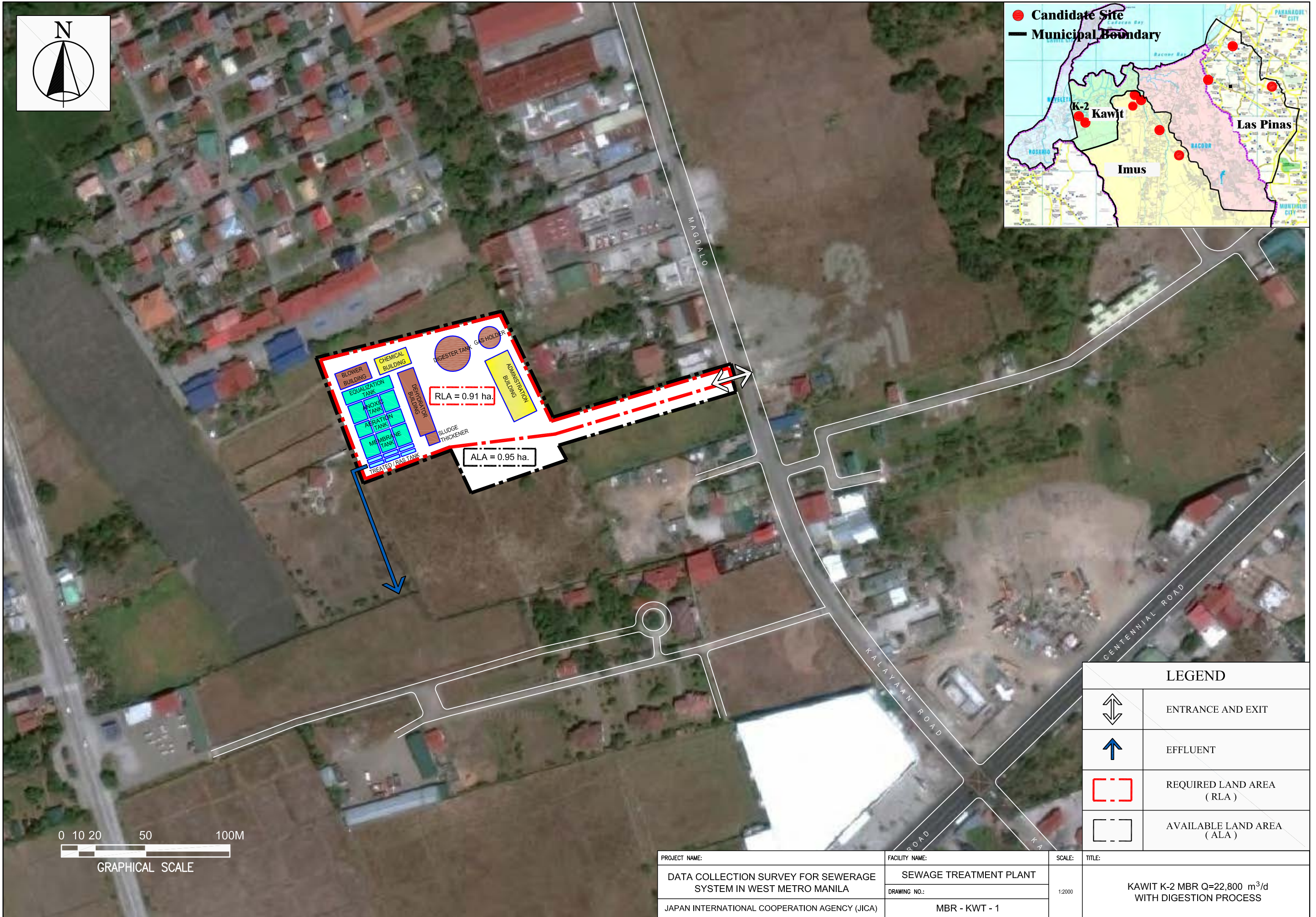
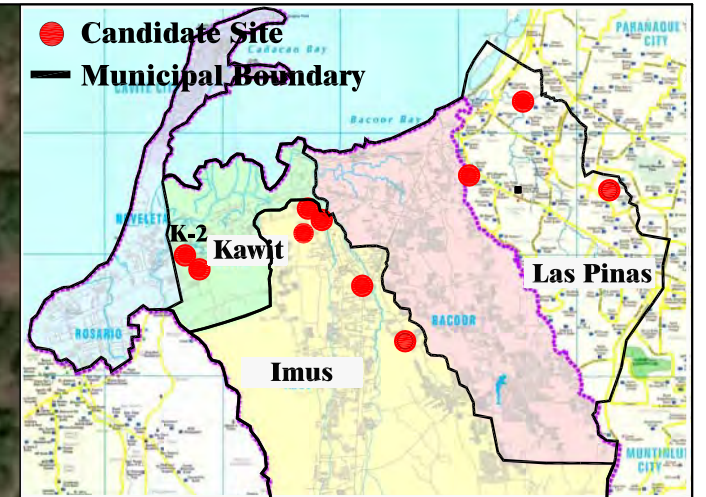
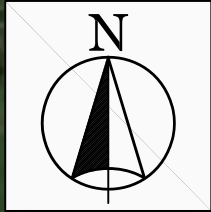
LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	KAWIT K-3 CAS Q=22,000 m ³ /d WITH DIGESTION PROCES
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	CAS - KWT - 1		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	KAWIT K-3 CAS Q=22,000 m ³ /d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	CAS - KWT - 2		



0 10 20 50 100M

GRAPHICAL SCALE

LEGEND



ENTRANCE AND EXIT



EFFLUENT

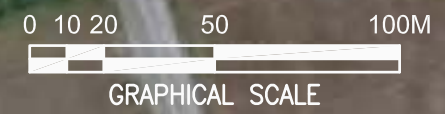
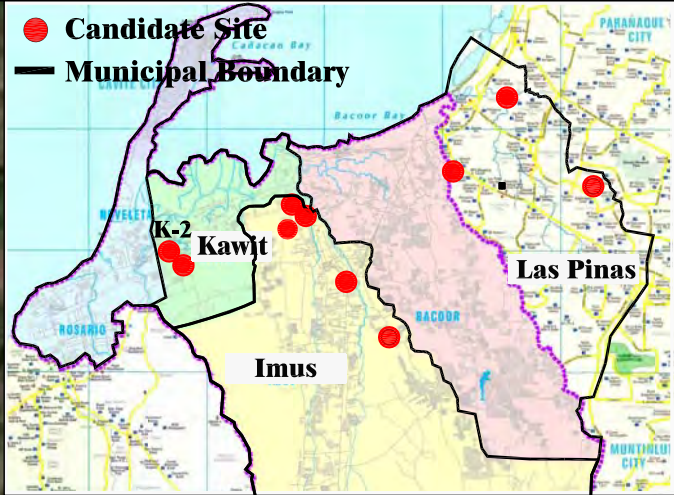
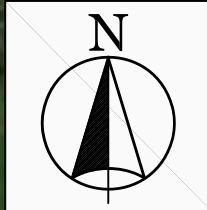


REQUIRED LAND AREA
(RLA)



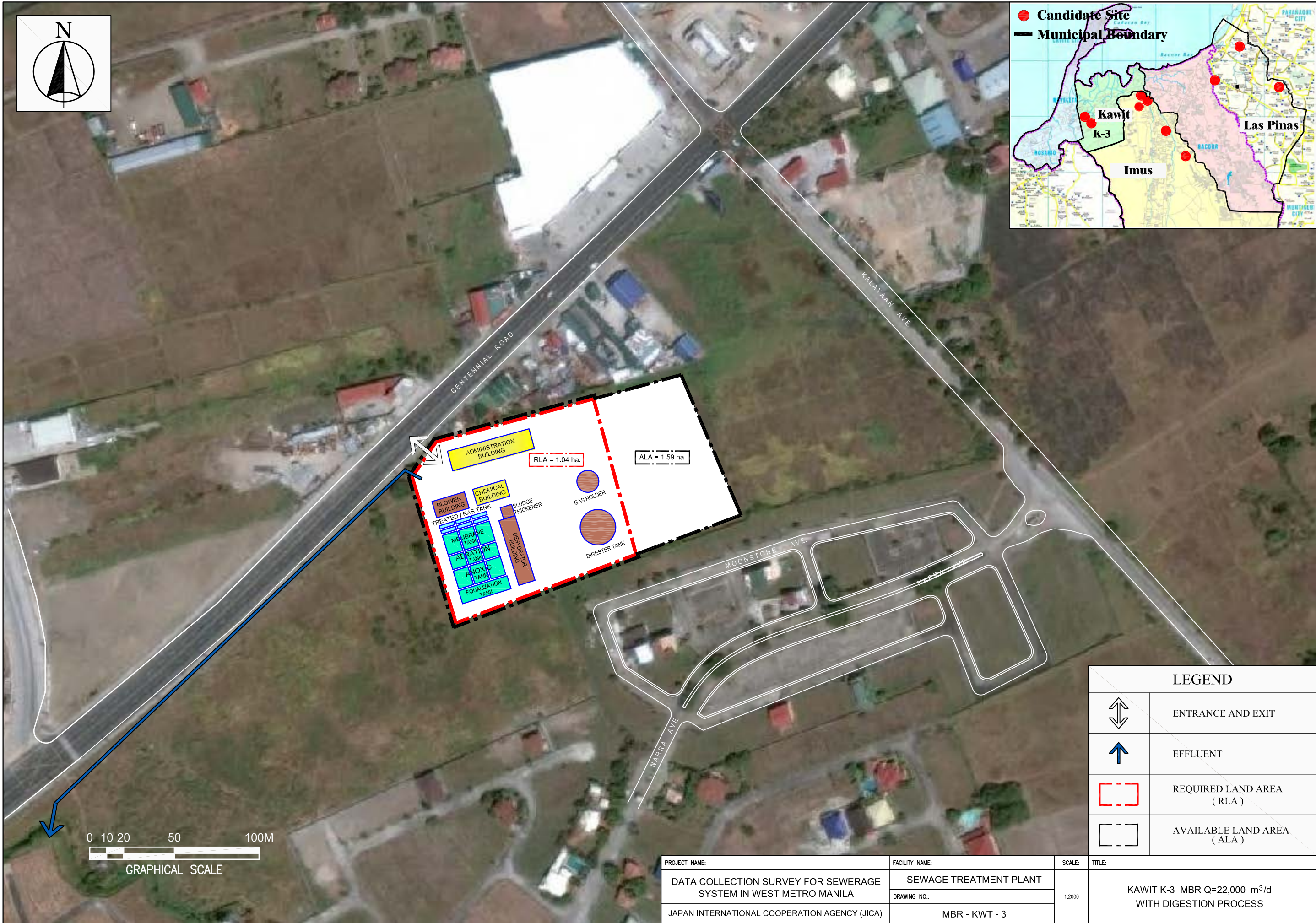
AVAILABLE LAND AREA
(ALA)

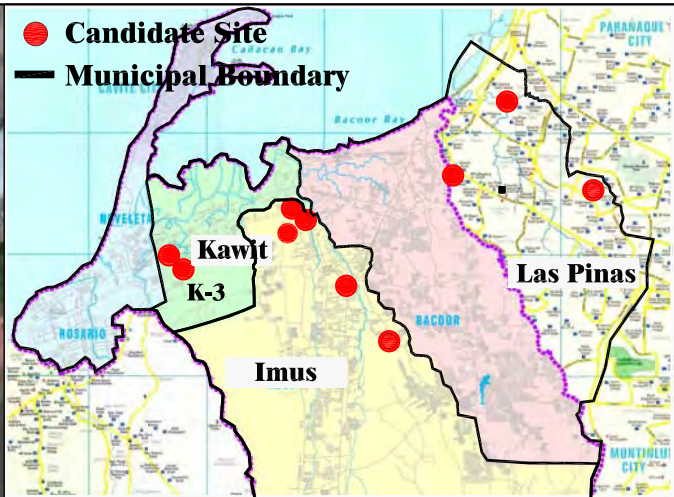
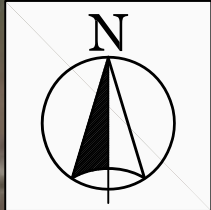
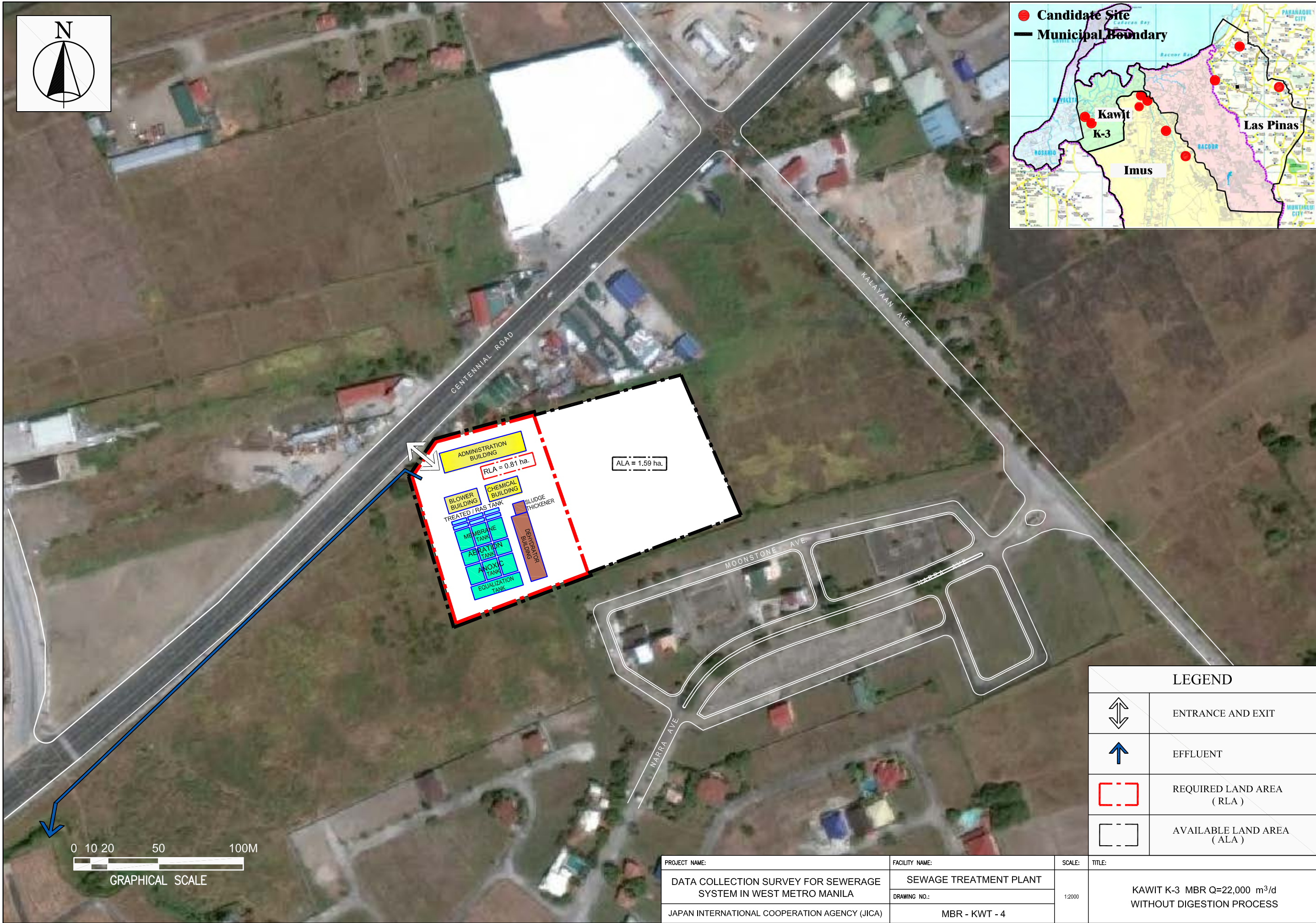
PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	KAWIT K-2 MBR Q=22,800 m ³ /d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	DRAWING NO.: MBR - KWT - 1		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	KAWIT K-2 MBR Q=22,800 m ³ /d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBR - KWT - 2		



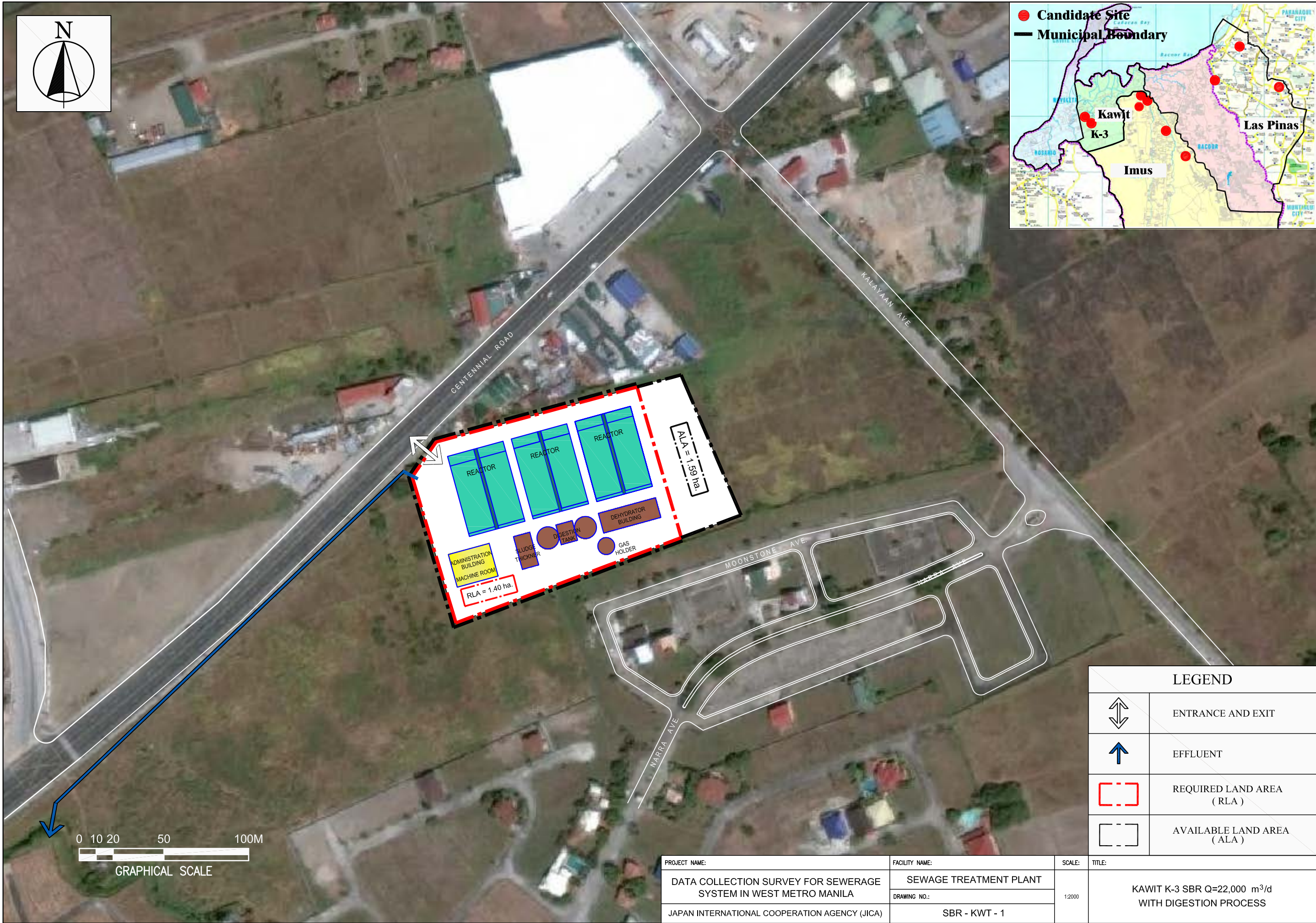


LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

0 10 20 50 100M

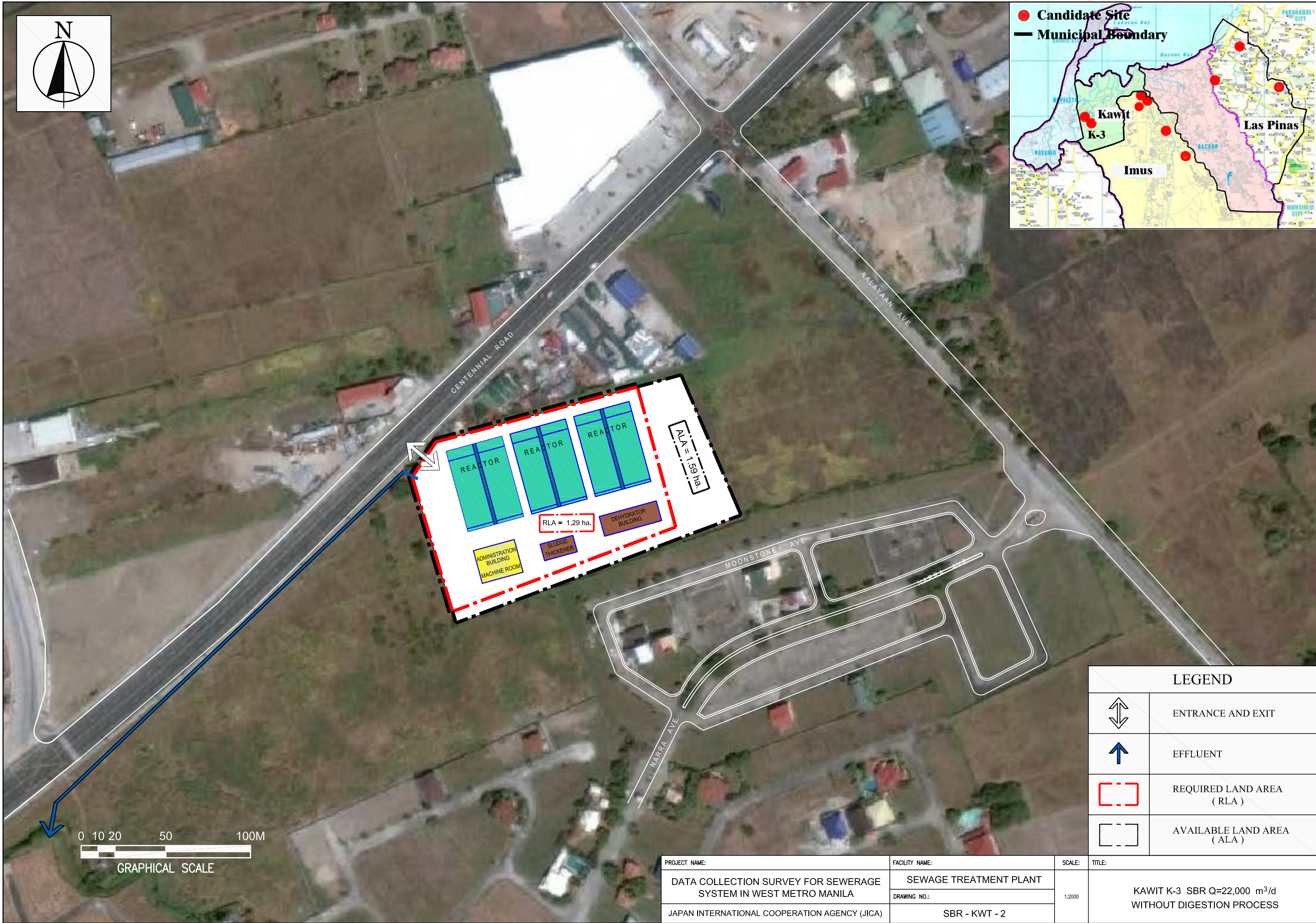
GRAPHICAL SCALE

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	KAWIT K-3 MBR Q=22,000 m ³ /d WITHOUT DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	MBR - KWT - 4		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)

PROJECT NAME:	FACILITY NAME:	SCALE:	TITLE:
DATA COLLECTION SURVEY FOR SEWERAGE SYSTEM IN WEST METRO MANILA	SEWAGE TREATMENT PLANT	1:2000	KAWIT K-3 SBR Q=22,000 m³/d WITH DIGESTION PROCESS
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	SBR - KWT - 1		



LEGEND	
	ENTRANCE AND EXIT
	EFFLUENT
	REQUIRED LAND AREA (RLA)
	AVAILABLE LAND AREA (ALA)
TITLE:	
KAWIT K-3 SBR Q=22,000 m ³ /d WITHOUT DIGESTION PROCESS	

